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ABSTRACT

The publication is intended to dispel misconceptions about the vocational rehabilitation service needs of deaf-blind persons. The first of five sections presents a history and comments on the philosophy of working with deaf-blind persons. Five programmatic definitions of deaf-blindness are offered. Section 2 addresses communication modes, aids, and devices (such as specific alphabets and braille hand speech) used by this population. The third section examines five topics: (1) administrative issues (legal aspects, program management); (2) a continuum of services (multi-agency collaborative networks, models of interagency agreements); (3) special needs of deaf blind persons (broken down into categories of types of deaf-blindness); (4) counselor concerns (caseload management, orientation and mobility, housing); and (5) the vocational rehabilitation process (training, job development). Section four examines training programs to enable rehabilitation personnel to deal with deaf blind clients and provides a list of resources that can be contacted for assistance. The final section is composed of references and a list of study group members who developed the document. (CL)

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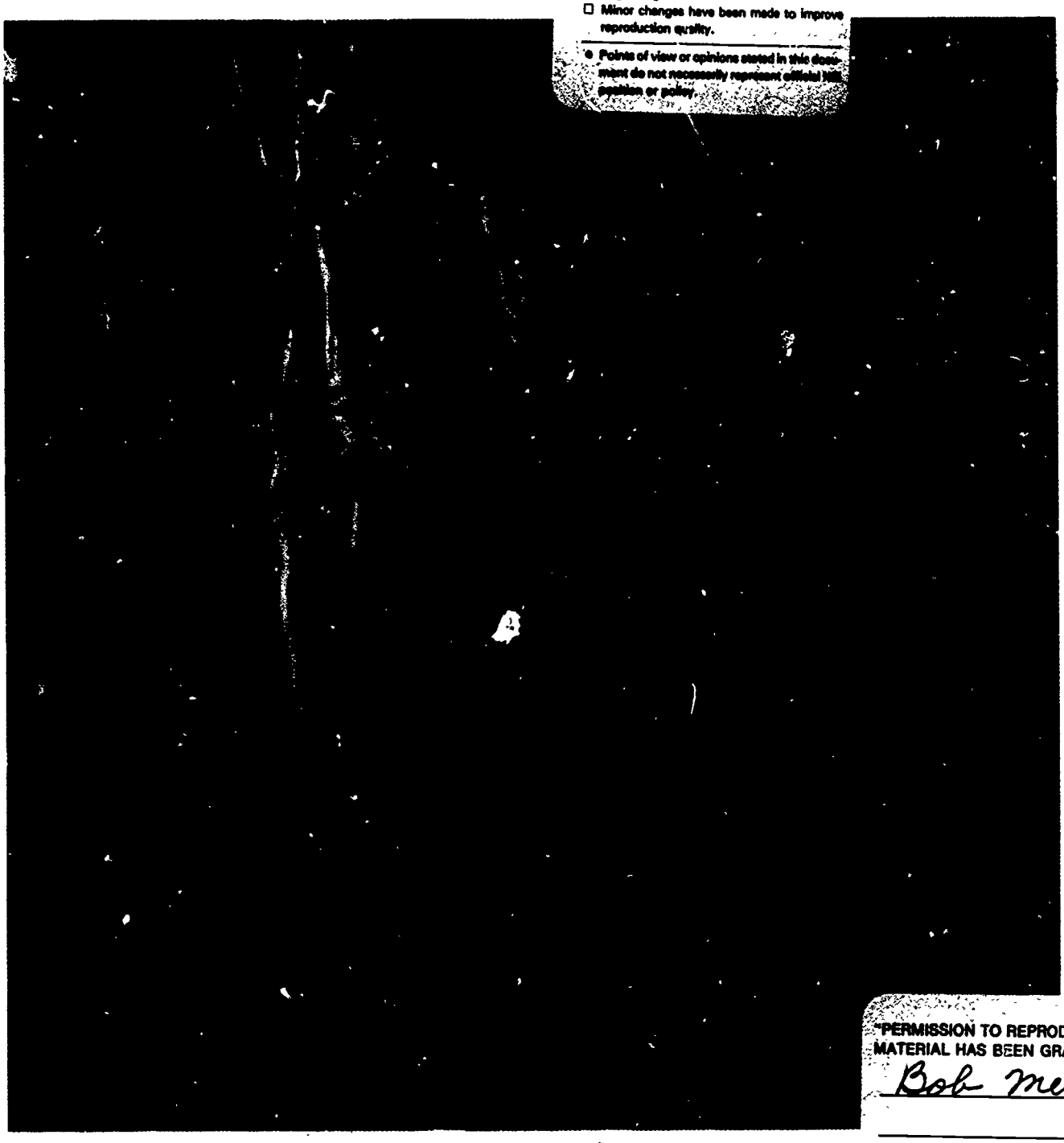

Eleventh Institute on Rehabilitation Issues

June 1984

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STRATEGIES FOR SERVING DEAF-BLIND CLIENTS

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June 1984
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Chairperson's Comments

The service needs of Deaf-Blind individuals have all too often been neglected by vocational rehabilitation. Many factors can be submitted for this failure including misconception towards this population, lack of knowledge or skill, inadequate time and fiscal constraints. It was the intent of the Prime Study Group that prepared this publication to dispel the misconceptions about Deaf-Blind persons by providing information about the population, successful programs and available resources.

Outstanding contributions of time, expertise, and just plain hard work by the Prime Study Group members have made this publication possible. These individuals brought experience from many fields including Blindness, Deafness, Special Education, Vocational Rehabilitation, and Deaf-Blindness in order to comprehensively address the topic. Special recognition goes to Doug Rice, of the Arkansas Rehabilitation Research and Training Center on Employability of Handicapped Persons, who provided support and direction to the group throughout the entire process.

With the help of individuals like Doug Watson, Marty Adler, Doug Rice, and others, and with members of the Prime Study and Full Study groups working with Deaf-Blind individuals, the service needs of this population can be met.

Valerie Kanar
Boston, Massachusetts

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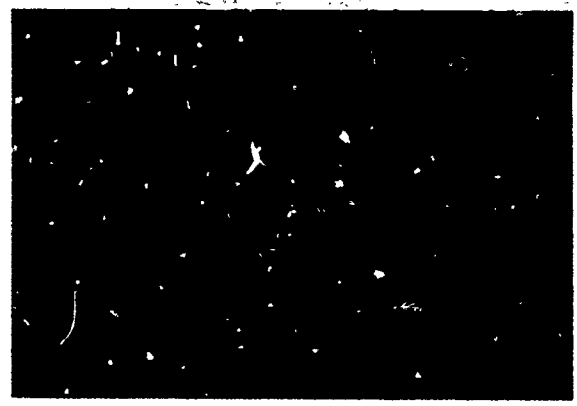
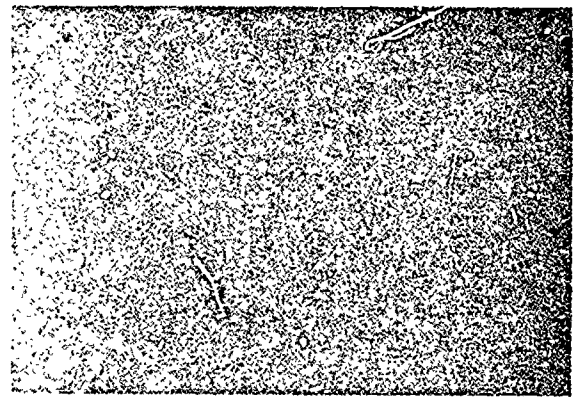
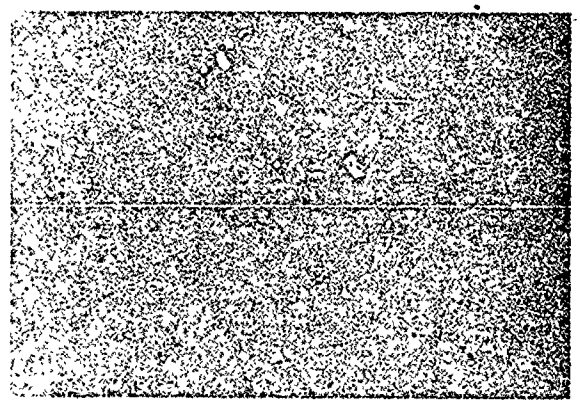
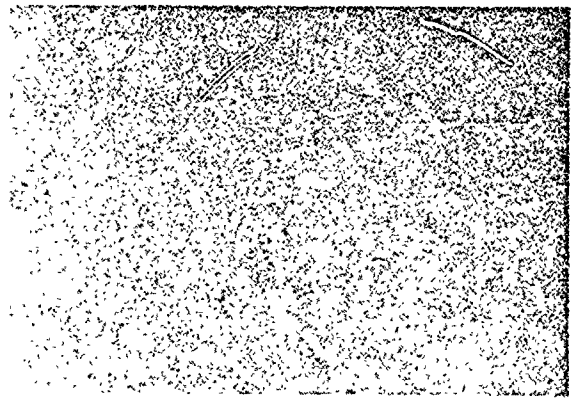








Truly it is a
day of
thanksgiving for me
when deliverance
begins to smile
upon human beings
everywhere whose
fate is saddest
because
they cannot speak
or have a word
spoken to them.

Committee on
Services for the
Deaf-Blind,
1959

A Historical and Philosophical Review of Deaf-Blindness

Objectives

1. To review historical milestones, myths, and attitudes pertaining to Deaf-Blindness.
2. To review the general legislative history relevant to the education and vocational rehabilitation of Deaf-Blind persons.

Summary

A review of historical data regarding Deaf-Blind Persons reveals that until recently information focused upon extraordinary achievement of selected individuals rather than the Deaf-Blind population as a group. These individual cases are the exception rather than the rule, as myths, misunderstandings, and misguided attitudes pertaining to Deaf-Blindness as a disability group have adversely affected education and rehabilitation efforts. Nevertheless, the important role of individuals, both deaf-blind and others, contributed to the formation of service and advocacy programs. In addition to services performed by individuals and agencies, historical and legislative milestones are reviewed.

Discussion

> Every human being, from the richest to the poorest, from the youngest to the oldest, from the most physically fit to the most misshapen, has the inalienable right to existence and to as normal a life as possible under existing circumstances. The education that fits one for living, and the instruction that enables one to earn the wherewithal for a decent life are likewise inalienable rights of human beings in all civilized communities. Up to the last century, however, these fundamental rights were denied to a considerable part of humanity from ruthlessness, indifference or ignorance; through inability to change certain conditions long established and accepted; or through lack of adequate scientific data and practical experience in the realm of sociology.
>
> —Rocheleau & Mack, 1930

Although written in 1930, this concept is as applicable to Deaf-Blind Persons today as it was over five decades ago. Despite much progress, Deaf-Blind Persons represent a group that has been, and in many cases still is closeted by families who cannot benefit from services that could lead to independent lifestyles. Some myths and misconceptions continue to prevail.

Myths and Attitudes

The Helen Keller Syndrome - All Deaf-Blind persons can be as successful as Helen Keller.

The Dumb Syndrome - All Deaf-Blind persons are retarded and cannot learn.

The Leprosy Syndrome - Deaf-Blindness is contagious.

The Helpless Syndrome - Deaf-Blind persons are helpless or totally dependent on others.

The Rehabilitation-Training-Useless Syndrome - Deaf-Blind persons cannot benefit from training, cannot work in competitive employment, and can work only in sheltered workshops.

The Without Sight, Without Sound Syndrome - All Deaf-Blind persons are totally deaf and totally blind.

The Generic Service Syndrome - Deaf-Blind persons require no specialized services beyond those of the general rehabilitation population.

The Specialized Services Syndrome - Deaf-Blind persons have special needs that always require separate segregated services.

Although these myths pertaining to the population may be applicable in individual cases, they frequently become assumptions upon which services are planned or rejected, thus creating barriers to the delivery of comprehensive and appropriate services for Deaf-Blind persons.

History of Services

It is only in the past 50 years that Deaf-Blind persons have been educated or habilitated in the United States in any significant number. The earliest such effort on record is that of Dr. Samuel Gridley Howe to educate Laura Bridgman at Perkins School for the blind. His careful documentation of her education from 1837 to 1857 provided a framework, which formed a basis for work with Deaf-Blind persons for others to follow. Prior to the 1930's, however, only a few isolated, though well-publicized examples exist of Deaf-Blind persons having been educated.

1637 - Perhaps the first account of a deaf-blind person was found in Governor Winthrop's **Journal of the Massachusetts Bay Colony.** In Ipswich that year Governor Winthrop stated:

> There was an old woman in Ipswich who came out of England, blind and deaf, yet her son could make her understand anything, and know any man's name by her sense of feeling. He would write upon her hand some letters of the name, and by other such means would inform her

1758 - Perhaps the second account of a deaf-blind person was given in **The Annual Register** in England. This was an account of "what happened to a lady after having had the confluent kind of smallpox." (Rocheleau & Mack, 1938). There is an impression here that she suffered many neurological and physical problems after receiving what was to be the last dose of medicine for a cure. They state:

> To remove or mitigate these deplorable symptoms, many remedies were tried, and among others, the cold bath: but either by the natural effect of the bath, or by some mismanagement in the bathing, the unhappy patient first became blind and soon afterward deaf and dumb

According to additional comments, Rocheleau and Mack reported that this lady's "touch and smell became very exquisite." She learned to communicate by "talking with her fingers, at which she was uncommonly ready." This so intrigued the professionals of England of that day that they set up experiments, without her knowledge, to determine whether or not her handicap was truly as it seemed to be—it was!

1795 - A young man, James Mitchell, is referred to as "one who had made remarkable success despite the handicap." Born in Scotland in 1795, he, perhaps more than other Deaf-Blind youths of that day, took full advantage of his senses of touch, taste, and smell. According to comments in **Children of the Silent Night**, (Farrell, n.d.), James Mitchell was able to distinguish non-family members by their smell and to identify his own clothing by the same manner. Despite the belief by philosophers and teachers that James Mitchell had a good deal of intelligence and curiosity, no effort was developed to offer him an educational opportunity. It seemed that their sole involvement with him, and other Deaf-Blind youngsters at that time, was to study him and his activities.

1830 - Dr. Samuel Gridley Howe, interested in the education of the blind, opened Perkins Institution for the Blind. He believed he could develop an educational program for Deaf-Blind children. Upon visiting Laura Bridgman, he observed that she had the curiosity and ability to learn and appeared to be a good candidate for him to pursue his belief.

1837 - Laura Bridgman entered Perkins and did develop some language and some ability to utilize her time constructively, but had to remain at Perkins the rest of her life.

The beginning of the teaching of a formal method of communication, which was eventually followed by other schools offering programs to Deaf-Blind children was initiated by Dr. Howe. The following is from **Children of the Silent Night** (n.d.).

> 'There was one of two ways to be adopted,' wrote Dr Howe, 'either to go on to build up a language of signs on the basis of the natural language which she had already commenced herself; or to teach her the purely arbitrary language in common use, that is, to give her a knowledge of letters, by combination of which she might express her idea of the existence, and the mode and condition of existence, of any thing. The former would have been easy, but very ineffectual; the latter seemed very difficult, but, if accomplished, very effectual; I determined, therefore, to try the latter.' (Farrell, n.d.)

1888 - As a result of this success, other Deaf-Blind children were accepted at Perkins; and in 1889 Helen Keller, with her assigned teacher, Anne Sullivan, entered Perkins.

1896 - Helen Keller, accompanied by Anne Sullivan, attended Cambridge School for Girls.

1904 - Helen Keller was the first Deaf-Blind person to graduate from college. She graduated from Radcliffe College, again accompanied by Anne Sullivan. Although Helen Keller was always with Anne Sullivan, she, nevertheless, led an active life for her own satisfaction and for the benefit of other handicapped persons throughout the world.

1920 - Prior to this time, workshops for the blind only employed a Deaf-Blind person who fit into their program. Apparently there was no effort made at opening their facility to more than one, except for The Industrial Home for the Blind (IHB), in Brooklyn, NY. Dr. Peter J. Salmon, a graduate of Perkins School, was familiar with Deaf-Blind persons, with whom he communicated at Perkins. He started his employment at the IHB in 1919 and upon receiving the first request for employment in 1920 by a Deaf-Blind person, immediately realized the need and importance of this service.

1930 - In reviewing the brief description in **Those in the Dark Silence**, (Rocheleau & Mack, 1930), one learns that a number of adults who became Deaf-Blind had attended schools for the deaf, but there is no indication that they attended the schools as Deaf-Blind students. Unfortunately, there was no mention of specific eye conditions, such as retinitis pigmentosa, but it appears implicit that these were students who would now be classified as having Usher's Syndrome. Whether attending a school for the deaf or a school for the blind, employment opportunities were becoming available for Deaf-Blind persons, but were limited to workshops, with the exception of a few individuals who participated in some form of home industry. There was no indication that the employment was substantial or steady.

1932 - The English speaking world agreed to accept Braille as the tactile method of "print" for blind persons. This method made it more feasible for Deaf-Blind persons to communicate with each other by mail, rather than the confusion that existed previously.

1935 - Tanya Nash, the Director of the Jewish Society for the Deaf (now the New York Society for the Deaf) realized the potential for successful employment at the IHB during the mid-30's.

1940-1950 - During this period, mostly because of the war effort, Deaf-Blind persons, like others, could take advantage of the high production needs of that time. Despite the lack of faith that others had in the employability of this population, the IHB continued to show that this group was not only employable but capable of meeting demanding production standards, quotas, a greater degree of independence, and was financially capable of caring for their own and their family's needs.

1943 - The IHB maintained a residence for blind men close to its workshop, and at this time received a request to accept a Deaf-Blind (Usher's Syndrome) man. He was accepted on a trial period to explore the feasibility of blind and Deaf-Blind people living together. This success led to other Deaf-Blind persons being accepted. Ultimately a total of 32 Deaf-Blind men lived at the residence, with an almost equal number of blind men.

1945 - The IHB realized the need for better understanding between blind and the Usher's Syndrome Deaf-Blind, as well as the need for recreation and social activities, and inaugurated the world's first comprehensive program with the cooperation and guidance of Helen Keller, who was at the opening day dinner. The newly formed program was directed by Vincent Bettica, who showed the sensitivity and interest appreciated by the Deaf-Blind clients. Helen Keller, in her keynote presentation at the opening meeting, stated:

> Ever since I realized as a young girl that there were people without sight or hearing, unbefriended, untaught, I have passionately prayed for and sought a solution of their problem. The consciousness of the heartbreaking lot of this, the loneliest, most isolated and defenseless group among the blind, has always been a bitter drop in the cup of my own blessings. They have been for the most part neglected, not because doers of good are reluctant to aid them, but because those doubly handicapped are widely scattered over a great continent and often hard to reach. Consequently there has been no organized effort to educate and train them for usefulness among their normal fellow men
>
> That such an enterprise can be undertaken is splendidly proved at this gathering today in the Brooklyn Industrial Home for the Blind. Here actually you behold thirteen deaf-blind men who were fitted for many different kinds of work, and they have all proved their capabilities, strength and human dignity. They are independent, earning their own way and sharing in the support of their families and service to the community. What greater boon is there than this objective of happiness into which they can throw their once thwarted manhood and immortal spirits? (Salmon, 1970).

1946 - Through the cooperative efforts of Dr. Peter Salmon and Helen Keller, the American Foundation for the Blind (AFB) inaugurated its service to the Deaf-Blind department. This department was to develop a register and to provide some limited help to those Deaf-Blind persons across the country unable to receive help in their local areas. This deteriorated until AFB, through its department, found it necessary to supply typewriters, braille writers, hearing aids, as well as braille and standard typewriting paper.

1950 - Robert Smithdas received his Bachelor of Arts degree cum Laude from St. John's University in Brooklyn, NY. He was the first Deaf-Blind person to receive a college degree since Helen Keller, about 50 years earlier.

1953 - Robert Smithdas was the first Deaf-Blind person to receive a Master's degee. His degree was awarded from New York University where he majored in Vocational Guidance and Rehabilitation of the Handicapped. Like Helen Keller, he did have a companion-helper throughout his college career, but unlike Helen Keller, his companion also matriculated for a degree. Robert Smithdas did not live with his companion, as did Helen Keller, but lived at the IHB residence for about five years before moving into his own apartment.

National advocacy for Deaf-Blind persons during this period was actively pursued by Annette Dinsmore (who replaced Bryant at the AFB in 1950) and Louis Bettica. They were later joined at times by Dr. Salmon and Mr. Smithdas. Richard Kinney, the third Deaf-Blind person to graduate from college, joined this group of advocates in the late 1950's. Agencies were contacted and speeches were presented at the various national conferences of the American Association of Workers for the Blind (AAWB). This group focused on two major points:

1. To serve Deaf-Blind persons because it was obvious they were in need of services and had the right to service as other handicapped people.
2. To use the program at the IHB as an example to illustrate that Deaf-Blind men and women had the ability to benefit from services.

1956-1958 - The Federal Office of Vocational Rehabilitation (OVR) joined with the IHB in a two-year project to study the problems of Deaf-Blind persons, how these problems were being met, and what recommendations could be forwarded to the professional community.

This project, ending in 1958, published a series of seven volumes titled **A Manual for Professional Workers**. The titles of these volumes were:

A Manual for Profsssional Workers and Summary Report of a Pilot Study

Communication—A Key to Service for Deaf-Blind Men and Women

A Report of Medical Studies on Deaf-Blind Persons

A Report of Psychological Studies on Deaf-Blind Persons

Studies in the Vocational Adjustment of Deaf-Blind Adults

Recreation Services for Deaf-Blind Persons

Survey of Selected Characteristics of Deaf-Blind Adults in New York State, Fall 1957

These seven volumes may have contained more information relative to Deaf-Blindness than any other previous writings. Among a number of its recommendations, the participants felt it important to single out the need for regional programs in rehabilitation centers as the best plan for providing services to this group. The number of Deaf-Blind people known at that time was too small in each state for adequate and efficient state-wide programs.

1957 - The first international subcommittee meeting under the auspies of the World Council for the Welfare of the Blind was held at the IHB. All the subcommittee members were Deaf-Blind persons from Canada, England, the Netherlands, and the United States and were first to try to develop an international method of communication. After several days, the group decided that the selection of the Print-On-Palm method was most appropriate, since block letters were already used internationally.

The second responsibility of this subcommittee was to outline their recommendations for the initiation of minimal services that would be helpful to developing countries.

Dr. Gerrit Van Der Mey of the Netherlands, and Arthur Sculthorpe of England, joined several U.S. Deaf-Blind persons and gave the first international advocacy presentation at the annual convention of the American Association of Workers for the Blind in Chicago. They, like others before them, were anxious to share with the community of workers for the blind their experiences and successes as Deaf-Blind adults who had achieved a high degree of success educationally, vocationally and socially.

1959 - Dr. Richard Kenney presented the 1957 findings to the World Council for the Welfare of the Blind in Rome, Italy.

1962 - The report of the two-year study encouraged Vocational Rehabilitation Services to accept the challenge of developing rehabilitation services for this population. Despite the federal-state ratio costs (80%-20%), the Industrial Home for the Blind was the first to introduce a program on the regional level. In 1962 a project called THE ANNE SULLIVAN MACY SERVICE (ASMS) was initiated to serve 15 states of HEW regions I, II, and III. A provision was made that it could offer services to those persons outside these states when no other services in their community were available. Never overlooking the importance of increasing services to this population by local agencies, in addition to offering training to professional workers around the country, the major objectives of this program were as follows:

1. To demonstrate a pattern of comprehensive services that would maximize development of the rehabilitation potential of Deaf-Blind adults.
2. To demonstrate the ways in which state and local rehabilitation agencies could cooperate with each other and with the regional service in providing effective service to Deaf-Blind persons, thereby paving the way for development of ongoing community-based rehabilitation programs for this client group.
3. To conduct programs of research and study that would add to the sum of knowledge about Deaf-Blind persons, and how their rehabilitation could best be accomplished.
4. To establish tested service and administrative procedures on a regional scale that might stimulate and guide the establishment of similar programs in other parts of the United States (Salmon, 1970).

1964-1965 - Thousands of multihandicapped children (possibly 20,000, according to some) were born as a result of maternal rubella. These children, referred to as Rubella Children, brought a major problem to the existing services. It is estimated that at least 4,500 children are deaf-blind and a large percentage of them have handicaps in addition to the sensory losses.

1966 - Dr. Salmon and Dr. Edward Waterhouse, at that time Director of Perkins, remembering the delay in obtaining congressional funding during the retrolental fibroplasia epidemic in the early 50s, immediately sought legislation for this group.

With the approaching termination of the ASMS (1967), Dr. Salmon along with Harry Spar, and Louis Bettico met with Dr. Mary Switzer, Director of the Office of Vocational Rehabilitation, U.S. Department of Health, Education and Welfare, for the purpose of discussing the possibility of extending the ASMS to national responsibility. It was at this meeting that Dr. Switzer suggested that legislation be sought to develop a national program with its own facilities.

1967 - The ASMS was given a two-year extension during the interim period between its termination date and the passage of legislation for the national program.

Congress passed legislation entitled **Centers and Services for Deaf-Blind Children**, which authorized through Title VI-C funds to create ten regional centers in the nation to develop education and support services throughout the country (P.L. 90-247, 1967).

These centers were instrumental in developing hundreds of programs and classrooms on the state and local levels. These specialized programs were located within public schools for the blind or the deaf, state institutions, and private agencies.

Through the Vocational Rehabilitation Act of 1967, Congress, with a unanimous vote, created funding for the development of the National Center for Deaf-Blind Youths and Adults which become the Helen Keller National Center (HKNC). This program was to provide rehabilitation services for this population on a national level, to demonstrate methods of providing services to the Deaf-Blind persons, to conduct research, to train professional personnel, and to improve public understanding of the problems of Deaf-Blind persons.

1969 - At the termination of the ASMS, the following conclusions were drawn:

> Given the right kind and degree of professional help, the rehabilitation potential of Deaf-Blind persons is both real and realizable.
>
> The physical, emotional, psychological, social and economic barriers to rehabilitation are by no means impregnable.
>
> By harnessing the combined strengths of established state and local agencies, the improved levels of functioning of rehabilitation Deaf-Blind adults can be effectively maintained in community settings.
>
> Existing public attitudes of indifference, avoidance and fear can be reshaped into more affirmative channels; neglect can be replaced by concern, hopelessness by constructive and purposeful activity. (Salmon, 1970).

An Ad Hoc Committee was formed and selected The Industrial Home for the Blind, from among six applicants, to operate the National Center.

Without interruption, the service staff of the ASMS were transferred to the National Center. They continued using the IHB facilities exclusively for one year, and then moved into their own temporary facility. Because of the temporary nature and the small size of the facility, some activities were continued at the IHB center.

McCay Vernon, Ph.D., a prominent psychologist, wrote a paper entitled "Usher's Syndrome - Deafness and Progessive Blindness" which had an impact on the development of interest in this population by workers for the deaf.

1973 - Congress authorized the name of the "Center" to be changed to **Helen Keller National Center for Deaf-Blind Youths and Adults** (HKNC).

The American Association of the Deaf-Blind, the Cleveland Society for the Blind, and HKNC worked together to establish the first week-long convention for Deaf-Blind persons. It has met every year since. Currently, Deaf-Blind men and women themselves are taking the major role in planning, directing, and participating; whereas initially most of the work was done by professional workers.

Credit must be given to Doris Callahan, the president of the association, for her efforts in involving these agencies. She was assisted by Walter Boninger of the Cleveland Society for the Blind and Louis Bettica of HKNC.

The "First Historic Helen Keller World Conference" was held in New York City with the HKNC as its host. Dr. Richard Kinney became chairman of the Committee on Services to the Deaf-Blind of the WCWB, replacing Dr. Peter Salmon. Another world conference with more than 100 Deaf-Blind persons in attendance, was held in Hanover, Germany, and a more recent one held in Bahrain, Asia.

1976 - The Unseen Minority - A Social History of Blindness in the United States (Frances A. Koestler) contains a chapter on Deaf-Blindness. This book has been so well received by workers for the blind that Ms. Koestler was presented with the Ambrose B. Shotwell Award—the highest honor of the American Association of Workers for the Blind.

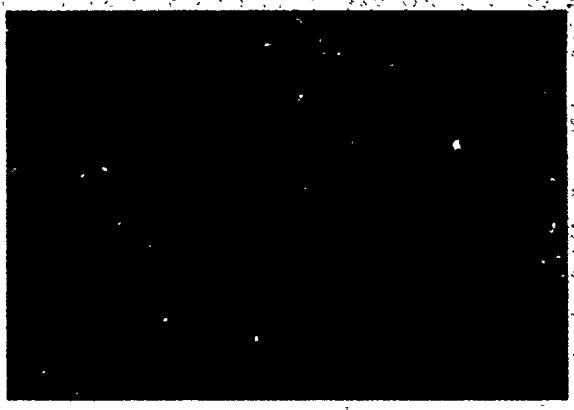
1984 - Congress authorized the removal of HKNC from RSA funding and placed it on an "on-line" funding by Congress—thus it became directly responsible to Congress.

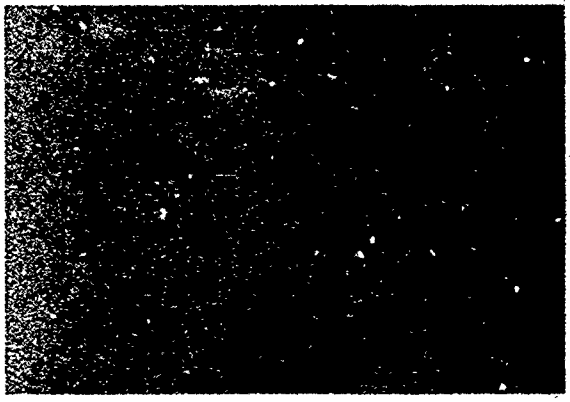
Conclusion

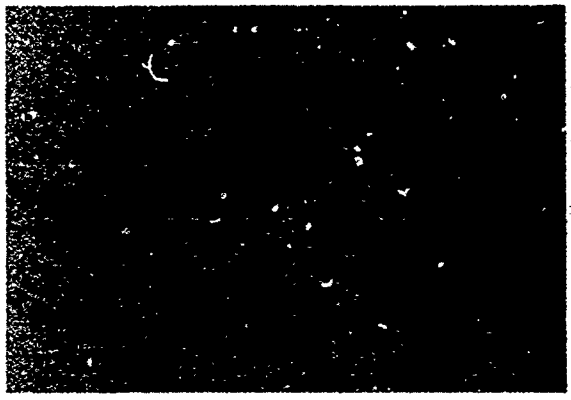
The historical milestones described above illustrate the movement and growth of Deaf-Blind

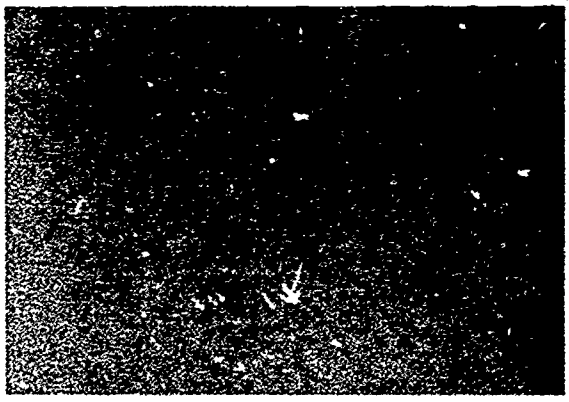
persons: from individuals who were simply able to behave in the lowest form of human life to a point where a college education is possible. This growth was initially possible only through the help of others, but recently we are seeing the movement toward self-direction by a number of capable men and women. It is obvious that Deaf-Blind persons do benefit from appropriate services and these services must continue to be available.

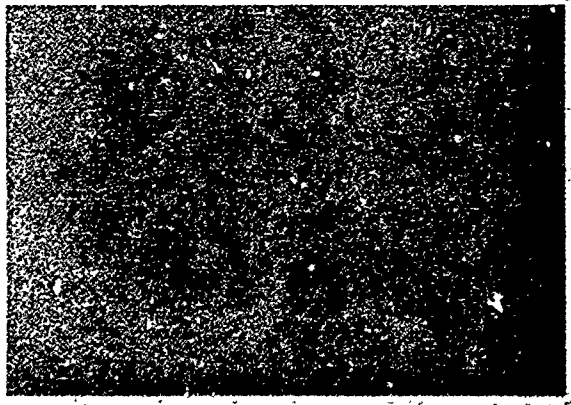
There must be a resolve to utilize the energies and drives of an emerging Deaf-Blind population in rehabilitation efforts designed on their behalf.











It should be noted that the vast majority of Deaf-Blind individuals retain at least some usable residual capability in at least one of the senses.

A majority of deaf-blind individuals are likely candidates for special aids and appliances designed to utilize these residual abilities.

It is vital that a thorough evaluation of the potential for utilization of the residual sense(s) becomes a critical component of service to the Deaf-Blind client.

NDBIRC, 1983

Definitions of the Service Populations

Objectives:

1. To present and discuss five programmatic definitions of Deaf-Blindness: IRI Study Group, Specia. Education, Rehabilitation Services Administration (RSA), Developmental Disabilities and Social Security Administration.
2. To present estimates of the size of the Deaf-Blind population.
3. To present available data on the causes of Deaf-Blindness.

Summary:

Few demographic studies are available to describe the population of Deaf-Blind individuals. This is true because of the low population incidence and the lack of any standard definition with which to approach such a study. Definitions and existing information on Deaf-Blind persons will be presented here in order to illustrate possible service implications for the population. The IRI Study Group offers a functional definition which may be helpful to interagency cooperative efforts.

Discussion:

In order to adequately develop services to Deaf-Blind persons, it is necessary to determine **who** is Deaf-Blind, and **how many** individuals are Deaf-Blind.

For working purposes the IRI Study Group offers the following functional description on Deaf-Blindness if any of the following criteria are met:

A. Even when the individual is fitted with the best corrective aid, auditory and visual losses exist and continue to pose severe visual impairment or blindness, and hearing impairment or deafness as defined by the state. The combination of these impairments causes extreme difficulty in attaining the maximum level of independence possible.

B. A combination of auditory and visual dysfunction exists, which may or may not be measurable by available technological means, but which causes the individual to **function** as severely visually impaired and auditorially impaired. The functional impairment of both the visual and auditory senses presents extreme difficulty in attaining the maximum level of independence possible, or

C. A progressive auditory or visual loss exists, which in conjunction with any present loss in the corresponding sense may lead, over time, to severe visual and auditory impairment and may cause extreme difficulty for the individual in attaining the maximum level of independence possible.

This definition is, by design, very broad. As such, it aims to encompass the more restrictive definitions operative under other programs. The professional serving Deaf-Blind persons must review existing eligibility criteria on an individual basis.

Four major programs depend upon a definition of Deaf-Blindness: (1) Rehabilitation Services Administration Programs, (2) Special Education Programs, (both within the U.S. Department of Education), (3) Social Security Administration Programs, and (4) Developmental Disabilities Programs (both under the aegis of the U.S. Department of Health and Human Resources).

Each of these programs has independently developed criteria for service delivery to handicapped individuals. Program definitions may or may not specifically address blindness, deafness, and Deaf-

Blindness. The functional definition proposed by this IAI Study Group attempts to be inclusive of the federal parameters, and may be helpful in establishing greater cooperative efforts between agencies serving the Deaf-Blind population. At the present time, federal law provides the following guidelines within the departments and agencies specified. In reviewing the following definitions and/or eligibility criteria, it is obvious that variance exists from program to program, as well as from state to state.

A. Rehabilitation Services Administration (RSA), U.S. Dept. of Education

1. **Handicapped Individual:** (Titles I and III.) Any individual who:

   (i) has a physical or mental disability which for such individual constitutes or results in a substantial handicap to employment and (ii) can reasonably be expected to benefit in terms of employability, from vocational rehabilitation services provided pursuant to Titles I and III.

2. **Handicapped Individual:** (Titles IV and V.) Any individual who:

   (i) has a physical or mental impairment which substantially limits one or more of such person's major life activities, or (ii) has a record of such impairment or (iii) is regarded as having such an impairment.

3. **Blind Individual:** Any individual who is blind within the meaning of the laws relating to vocational rehabilitation in each state.

4. **Deaf Individual:** Not defined

5. **Deaf-Blind Individual:** Any person who is blind as defined in 1361.1(b), (see B above) and has a chronic hearing impairment so severe that most speech cannot be understood with optimum amplification and the combination of the two disabilities causes extreme difficulty for the person to attain independence in activities of daily living, psycho-social adjustment, or in the pursuit of a vocational objective.

B. Office of Special Education (OSE), U.S. Dept. of Education

1. **Handicapped Individual:** Specifies handicap according to subsets which include:

   a. Hard of hearing
   b. Deaf
   c. Visually handicapped
   d. Deaf-Blind
   e. Specific others as listed

2. **Blind/Visually Handicapped:**

   a. **Blind:** Not defined.

   b. **Visually Handicapped:** A visual impairment which, even with correction, adversely affects a child's educational performance. The term includes both partially seeing and blind children.

3. **Deaf/Hard of Hearing:**

   a. **Deaf:** Means a hearing impairment which is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects educational performance.

   b. **Hard of Hearing:** Means a hearing impairment, whether permanent or fluctuating, which adversely affects a child's

educational performance but which is not included under the definition as deaf.

4. **Deaf-Blind:** Means concommitant hearing and visual impairment the combination of which causes such severe communication and other developmental and educational problems that they cannot be accommodated in special education programs solely for deaf or blind children.

C. Administration for Developmental Disabilities, U.S. Dept. of Health and Human Resources:

Handicapped Individual: Not defined, however they address a portion of the handicapped population, those who are developmentally disabled.

a. Is attributable to a mental or physical impairment or combination of mental and physical impairments;

b. Is manifested before the individual attains age twenty-two;

c. Is likely to continue indefinitely;

d. Results in substantial functional limitations in three or more of the following areas of major life activity:

(i) self-care, (ii) receptive and expressive languages, (iii) learning, (iv) mobility, (v) self-direction, (vi) capacity for independent living; and (vii) economic self-sufficiency, and

e. Reflects the person's need for a combination and sequence of special, interdisciplinary, or generic care, treatment, or other services which are of lifelong or extended duration and are individually planned or coordinated.

D. Social Security Administration, U.S. Department of Health and Human Services:

1. **Disabled Individual:**Handicapped Individual is not defined, however Disabled Individual is defined.

a. **Disabled Individual:** A disabled individual is an individual who is unable to do any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months. To meet this definition, an individual must have a severe impairment, which causes the individual to be unable to perform the work previously done or any other substantial gainful activity which exists in the national economy. To determine whether an individual is able to do any other work, SSA considers residual functional capacity and age, education and work experience.

b. **Disabled Child:** SSA will consider a child disabled if the individual suffers from any medically determinable physical or mental impairment which compares in severity to an impairment that would make an adult (a person over age 18) disabled.

2. **Blind Individual:** "Statutory blindness is defined in the Law as central visual acuity of 20/200 or less in the better eye with the use of correcting lens. An eye which has a limitation in the field of vision so that the widest diameter of the visual field subtends an angle no greater than 20 degrees is considered to have a central visual acuity of 20/200 or less. Blindness must meet the duration requirement in Paragraph 404.1509.

3. **Deaf Individual:** Based on the guidelines below, the SSA will use a medical recommendation of deafness as the determination:

   a. **Hearing Impairment:** Hearing ability should be evaluated in terms of the person's ability to hear and distinguish speech.

      Loss of hearing can be quantitatively determined by an audiometer which meets the standards of the American National Standards Institute (ANSI) for air and bone conducted stimuli (i.e., ANSI S 3.6-1969 and ANSI S 3.13-1972, or subsequent comparable revisions) and performing all hearing measurements in an environment which meets the ANSI standard for maximal permissable background sound (ANSI S 3.1-1977).

      Speech discrimination should be determined using a standardized measure of speech discrimination ability in quiet at a test presentation level sufficient to ascertain maximum discrimination ability. The speech discrimination measure (test) used, and the level at which testing was done, must be reported.

      Hearing tests should be preceded by an otolaryngologi examination and should be performed by or under the supervision of an otolaryngologist or audiologist qualified to perform such tests.

      In order to establish an independent medical judgment as to the level of severity in a claimant alleging deafness, the following examinations should be reported: Otolaryngologic examination, pure tone air and bone audiometry, speech reception threshold (SRT), and speech discrimination testing. A copy of reports of medical examination and audiological evaluations must be submitted.

      Cases of alleged deafness should be documented by a hearing evaluation. Records obtained from a speech and hearing rehabilitation center or a special school for the deaf may be acceptable, but if these reports are not available, or are found to be inadequate, a current hearing evaluation should be submitted as outlined in the preceding paragraph.

   b. **Vertigo:** associated with disturbances of labyrinthine-vestibular function, including Meniere's disease. These disturbances of balance are characterized by an hallucination of motion or loss of position sense and a sensation of dizziness which may be constant or may occur in paroxysmal attacks. Nausea, vomiting, ataxia, and incapacitation are frequently observed, particularly during the acute attack. It is important to differentiate the report of rotary vertigo from that of 'dizziness' which is described as light-headedness, unsteadiness, confusion, or sycope.

      Menier's disease is characterized by paroxysmal attacks of vertigo, tinnitus, and fluctuating hearing loss. Remissions are unpredictable and irregular, but may be long-lasting; hence, the severity of impairment is best determined after prolonged observation and serial reexaminations.

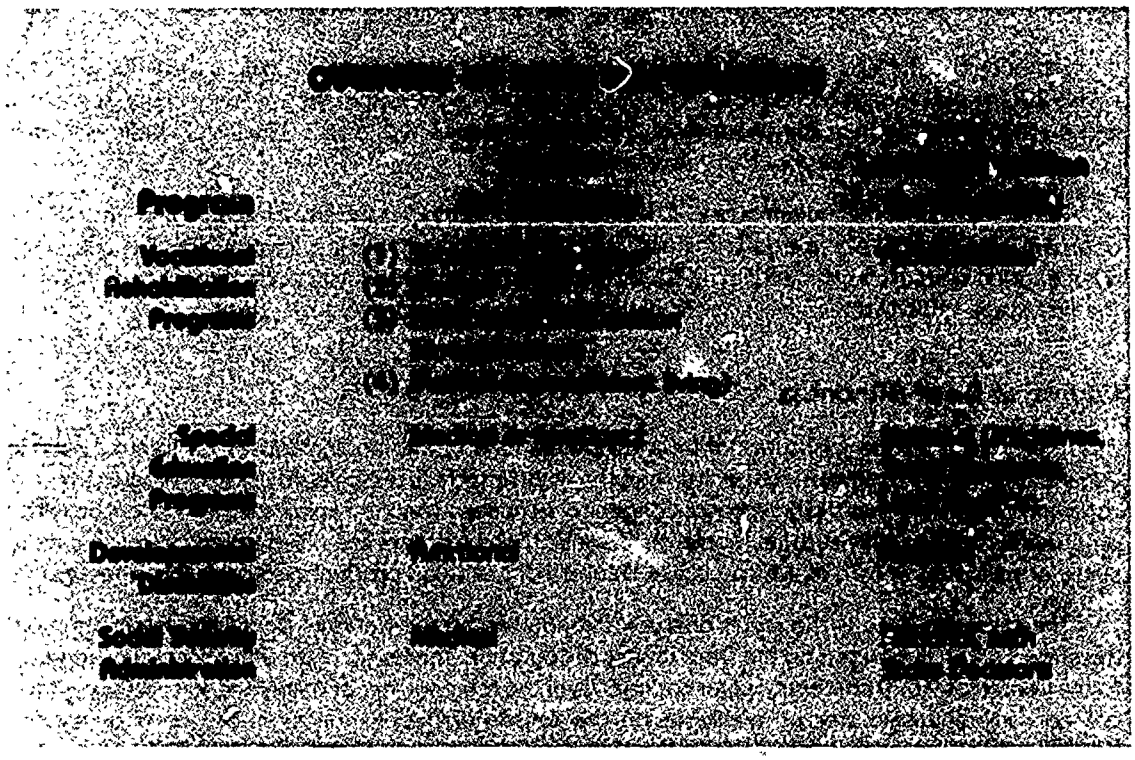
      The diagnosis of a vestibular disorder requires a comprehensive neuro-otolaryngologic examination with a detailed description of the vertiginous episodes, including notation of frequency, severity, and duration of the attacks. Pure tone and speech audiometry with the

appropriate special examinations, such as Bekesy audiometry, are necessary. Vestibular function is assessed by positional and caloric testing, preferably by electronystagmography. When polytograms, contrast radiography, or other special tests have been performed, copies of the reports of these tests should be obtained, in addition to reports of skull and temporal bone X-rays.

4. **Deaf-Blind Individual:** Deaf-blind is not a separate category for SSA purposes. An individual is disabled based on:

   a. Deafness, or
   b. Blindness,
   or a combination of losses severe enough to be equally limiting:

> "We can combine unrelated impairments to see if together they are severe enough to keep you from doing substantial gainful activity. We will consider the combined effects of unrelated impairments only if all are severe and expected to last 12 months."



It is imperative that a thorough evaluation of service providers' definitions and eligibility be completed in order to assure continuity and quality of service in the appropriate setting.

Population

Efforts to estimate the Deaf-Blind population in the United States have been seriously impaired by the wide variability in standards and eligibility criteria. Population estimates are further frustrated by the lack of an integrated national data base. At present, each state reports, through the educational system, the number of Deaf-Blind children served, yet classification differences within the single Department of Education cause the reported numbers to be somewhat unreliable. A Deaf-Blind student may be reported under one of three educational programs (Deaf, Blind, and Deaf-Blind), and in one of five classifications.

Currently there are two national registries of Deaf-Blind individuals: (1) The National Deaf-Blind Information and Resource Center (NDBIRC) maintains a Registry of known Deaf-Blind children 0-22 years of age. (2) The Helen Keller National Center (HKNC) registry contains all student data provided by NDBIRC, as well as other individuals identified across the country by the ten HKNC regional representatives. The NDBIRC Registry currently reports 3,575 students from 44 of 57 reporting sites. The HKNC Register has identified an additional 5,727 individuals, raising the national count of Deaf-Blind individuals to 9,300. Assuming that these registries contain names of only the more severely impaired Deaf-Blind individuals, it is estimated that the registries actually catalog one of every four individuals with both hearing and vision impairment. Thus, population predictions from the combined data bases range from 26,000 to 40,000 individuals. These population estimates are generally in agreement with the recent study of Wolf, Delk and Schein (AEDEX, 1982). The 45,310 Deaf-Blind population projection by the AEDEX study differs from the NDBIRC estimates by 34% and the HKNC estimates by 12%. It is likely that the inclusion of the geriatric population in the AEDEX Study, and the corresponding absence of that group in both the NDBIRC and HKNC, may account for the difference in projection.

The service implications of these population studies are myriad. Initially the myth of a "pocket" of Deaf-Blind individuals, associated with the 1963-64 Rubella epidemic, generated a dramatic increase of concern for development of appropriate services. Although estimates of that population run from 739 (Lockett and Rudolph, 1980) to 10,000 (Brewer and Kakalik, 1974; Franklin, 1968), even at the higher estimate this "bulge" is of consequence only as a spike in incidence.

Although the Rubella "bulge" individuals are surely of major concern, each year the NDBIRC reports nearly 200 newly diagnosed Deaf-Blind children. Nationally it is clear that the incidence of deaf-blindness is not insignificant, even in the absence of catastrophic events such as the 1963-64 Rubella epidemic. Continued attention to this population is essential.

From the available information, it appears that large numbers of Deaf-Blind individuals, approximately 75-80% of the expected population, are unknown to the service providers. Education and rehabilitation systems have identified 9,300 of the expected 45,000. Outreach and identification must be the first steps toward the establishment of appropriate service delivery systems.

Causes of Deaf-Blindness

There are a number of causes of Deaf-Blindness. One of the leading causes is Maternal Rubella. Usher's Syndrome, a severe congenital hearing impairment, is associated with a progressive eye condition known as retinitis pigmentosa. Congenital blindness (anopthalmia) can be associated with a progressive hearing loss such as Meniere's Disease. Finally, others are often traumatic causes, either singly or multiply involved which can cause Deaf-Blindness (e.g., accidents, catastrophic illnesses).

The following data is the result of studies conducted by the National Deaf-Blind Information and Resource Center, supported by the Department of Education. The cause of Deaf-Blindness was reported to the Center for 2,029 students, representing 57% of the total number of children reported. (Note: There are no comprehensive studies available on the causes of Deaf-Blindness in the adult population. However, limited data is available from the Helen Keller National Center.)

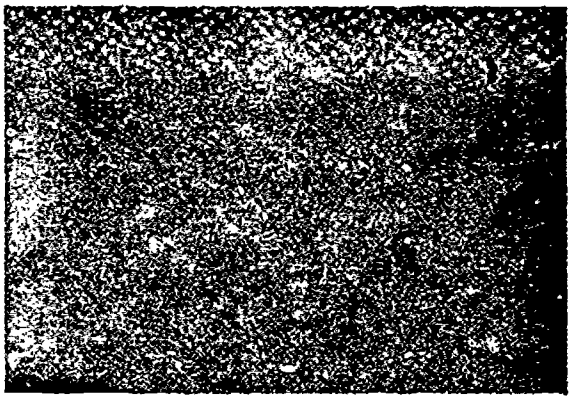
CAUSES OF DEAF-BLINDNESS

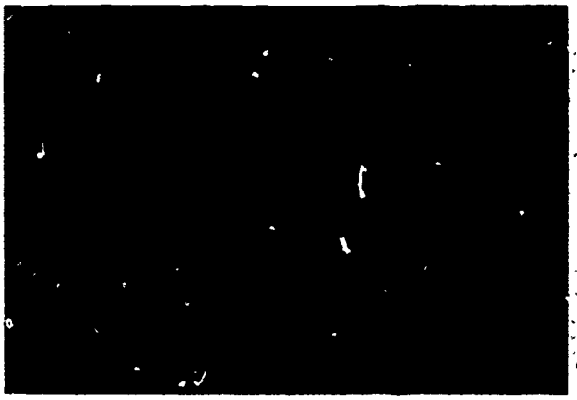
Children 0-22 years (N = 2,029), 1984

Rank Order	Causation	Number	% of Population
1	Maternal Rubella	940	46.3
2	Brain Damage	252	12.4
3	Diabetes	87	4.2
4	Meningitis/Encephalitis	84	4.1
5	Usher's Syndrome	65	3.2
6	Anoxia	62	3.1
7	Cerebral Maldevelopment	56	2.7
8	Trauma/Accident	45	2.2
9	Cerebral Palsy	41	2.1
10	All Other Causes	399	19.7
	TOTAL	2,029	100.0%

Particular attention is directed to Usher's Syndrome. While it is reported as the fifth leading cause of Deaf-Blindness in children, it should be remembered that Usher's Syndrome is frequently not diagnosed until early childhood or late adolescence. Incidence figures for Usher's Syndrome from Louisiana, as reported by that state's special project, would support the conclusion that frequently in the past, the deaf student with Usher's Syndrome was not diagnosed during the school years.

Contrary to the evidence shown above, Rubella is not the leading cause of Deaf-Blindness in the adult Deaf-Blind population. The major etiology of Deaf-Blindness for the adult continues to be Usher's Syndrome. One can assume from these statistics alone that because of the relatively low incidence of maternal Rubella, Usher's Syndrome individuals continue to represent the greatest category of Deaf-Blindness.



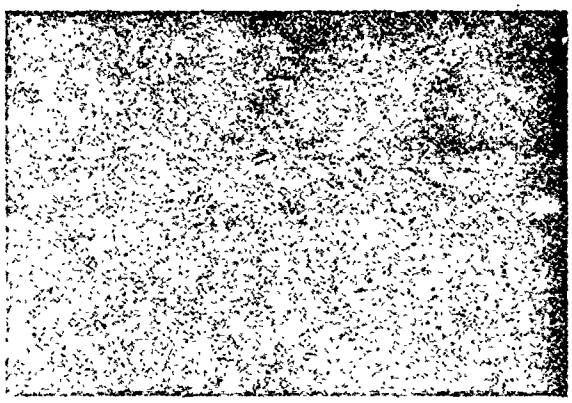


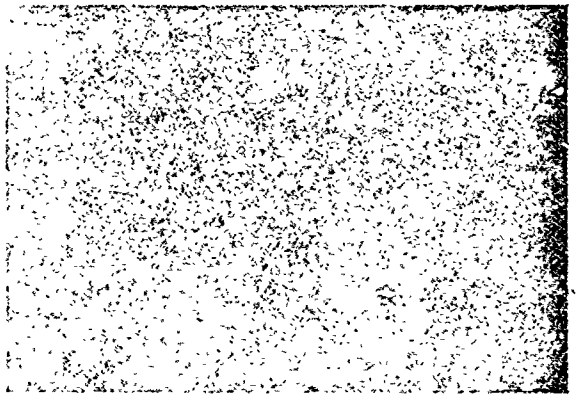
Serving Deaf-Blind persons requires that we interact with each individual as an individual, especially in relation to communication.

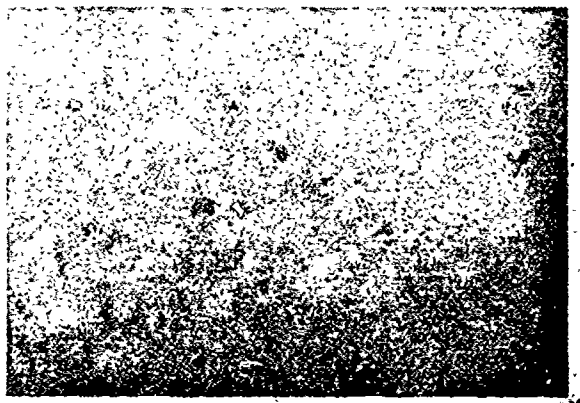
Communication must be conducted at the client's level in a mode that she/he prefers and is most comfortable with.

The service provider(s) therefore must be cognizant of the developmental implications of deaf-blindness and must also be familiar with the wide range of language abilities and communication modes used by Deaf-Blind persons.

Naegele & Nelipovich, 1984







Communication: Modes, Aids and Devices

Objectives

1. To identify and describe various communication modalities used by Deaf-Blind persons.
2. To describe the role and qualifications of interpreters for Deaf-Blind persons.
3. To identify and describe various aids and devices used by Deaf-Blind persons for communication.

Summary

Deaf-Blindness is a disability characterized by the loss and/or inability to take advantage of vision and hearing. This combined loss results in unique receptive and expressive communication barriers encountered by Deaf-Blind persons, and by persons attempting to communicate with them.

Deaf-Blind persons communicate through a variety of methods. Factors which can affect the mode of communication preferred by the Deaf-Blind person include: (1) age of onset of hearing and/or visual impairment, (2) degree of hearing and/or visual impairment, (3) etiology of hearing and/or visual impairment, (4) language capabilities, and (5) previous life experiences. Any one, or a combination, of these factors will affect the Deaf-Blind person's proficiency in the English language. Professionals working with Deaf-Blind persons need to assess the Deaf-Blind person's proficiency in English and be aware of the communication methods that require the ability to function in the English language.

Generally, it can be assumed that hearing-impaired/deaf persons who acquire sign language and/or fingerspelling prior to the development of a visual impairment, will continue to use sign language as their primary mode of communication. Within this group there are persons who develop excellent English language skills, and persons who may have deficits due to the severity of the hearing impairment. Generally, it can also be assumed that visually-impaired/blind persons who acquire braille skills prior to the development of a hearing-impairment, will continue to use braille, and will learn to read tactile fingerspelling. However, the loss of vision due to diabetes is often accompanied by a decrease of sensitivity of the fingertips, and the use of braille may not be a viable means of communication. Taking just a few of these factors into consideration, it is incumbent for professionals wishing to communicate with Deaf-Blind persons to be familiar with as many of the communication modes as possible.

A discussion will follow describing the most frequently used methods of communication, as well as considerations involved in providing interpreter services to Deaf-Blind persons. The types of communication modes, aids and devices presented will be grouped into three categories depending on the primary sense used: (1) residual vision, (2) residual hearing, (3) tactile. Deaf-Blind persons may use any one of the three, or a combination of these categories depending on the degree of loss of vision and/or hearing.

Discussion

A. Methods Of Communication

The four methods of communication most frequently used by Deaf-Blind persons in the United States are: sign language, fingerspelling, aural/oral, and braille. The Deaf-Blind person's preferred mode must be taken into consideration to establish effective communication. A description of these communication systems follows:

1. Sign Language

Sign language, whether visual or tactile, is the most widely used communication method by Deaf-Blind people who associate themselves with the deaf community, and became visually-impaired/blind after learning sign language. This also includes those persons affected by retinitis pigmentosa.

Sign language can be placed along a continuum which has American Sign Language (ASL) at one end and manual English on the other end. American Sign Language is a language which uses various hand shapes with specific movements in a defined signing space. Each sign represents a whole word or concept. ASL is a language different from English with its own syntax and grammatical rules. Manual English, however, borrows many of the same signs from American Sign Language, but approximates English word order in its choice of signs, and "invents" signs to parallel English tenses and endings that are characteristic of the spoken language. It is imperative for anyone attempting to communicate in sign language to identify the form used by the Deaf-Blind person for ease of communication.

For the Deaf-Blind person functioning within a restricted field of vision, all signing must be done within their visual field. Deaf-Blind persons who do not have sufficient residual vision will need to rely on some tactile mode. The speaker still uses both hands to form signs in the same manner as in the visual mode; however, the Deaf-Blind person reads the message by placing his/her hands on the speaker's hands, and feels the movements and hand shapes.

2. Fingerspelling (American One-Hand-Alphabet, Manual Alphabet)

The letters A-Z and all numbers are formed by positioning the fingers of one hand into specific hand shapes. Letters are presented in succession to form words and sentences. This method assumes proficiency in the English language.

When using residual vision, the letters must be presented within the visual field of the Deaf-Blind person. To assure effective reception, it is advisable for the Deaf-Blind person to position the speaker's hand.

The most commonly used method of tactile communication is tactile fingerspelling, which uses the same hand shapes as the visual mode. However, the Deaf-Blind person places his/her hand lightly over the speaker's hand to feel the specific hand shape of the letters and/or numbers.

FINGERSPELLING

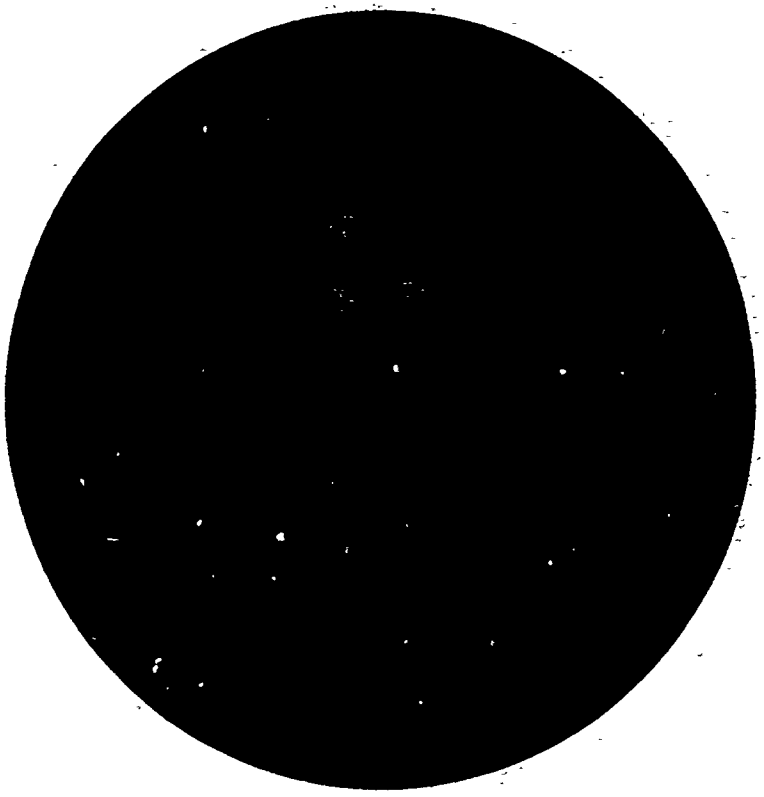
3. Aural/Oral (Auditory-Oral, Speech)

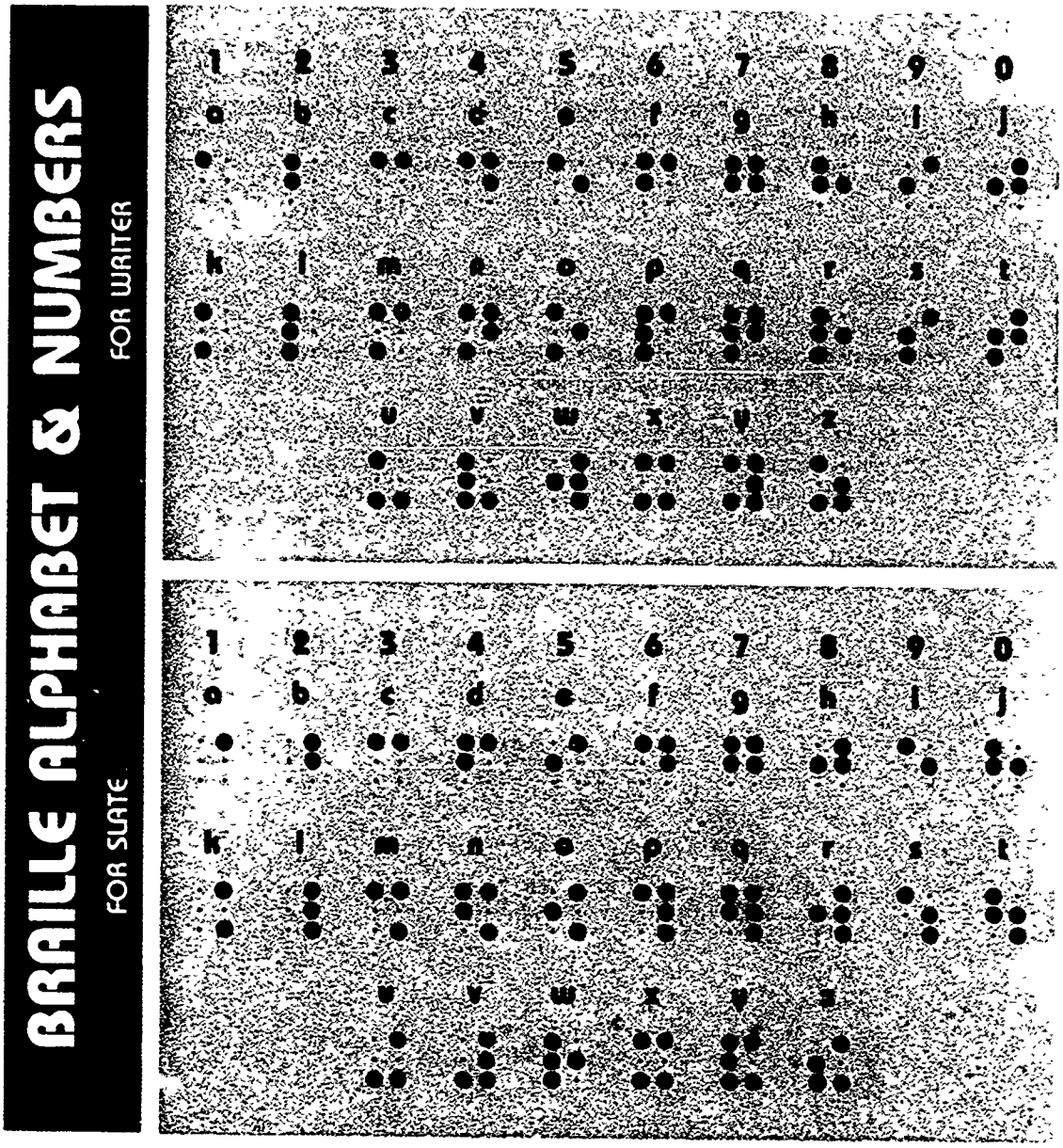
This method is used by Deaf-Blind persons who have sufficient residual hearing to hear and understand speech with the use of amplification, and/or who can express themselves through speech. The Deaf-Blind person will determine the appropriate distance from speakers to facilitate the use of amplified residual hearing, and the speaker should be sensitive to these cues.

4. Braille

Braille is a system of touch reading that uses raised dots to represent the letters of the alphabet and numbers 0-9. Six dots are arranged in two vertical columns of three dots each. The six dots of the cell are numbered 1,2,3 downward on the left, and 4,5,6 downward on the right.

Braille has two levels or grades: Grade 1 and Grade 2. In Grade 1 Braille, each word is spelled out, letter by letter. It consists of the letters of the alphabet, punctuations, number and composition signs. Grade 2 Braille incorporates 189 specific contractions and short-form words which eliminates the need to spell every word letter by letter.





B. Interpreter Services For Deaf-Blind Persons

The Registry of Interpreters for the Deaf (RID), in cooperation with state chapters, operates the National Certification of interpreters for the deaf. Certified interpreters can be contracted through a variety of sources, including state RID chapters, their affiliates, interpreter referral services, and/or state rehabilitation agencies. Although certified interpreters are available around the major urban centers in most states, shortages persist in other sections since the need exceeds the availability. The problems in locating and accessing qualified interpreters for Deaf-Blind persons is further exacerbated because the field of interpreting, at present, does not grant a specialist certificate in interpreting for Deaf-Blind persons; nor is training available for that specific purpose. Therefore, there is no pool of certified interpreters who are specifically trained to work with Deaf-Blind persons. However, there does exist a limited number of interpreters and other professionals who are skilled in communication with Deaf-Blind persons.

Preferably, when available, certified interpreters for the deaf who are knowledgeable in the profession of interpreting, skilled in all forms of sign language, and who have had experience in communicating tactually and/or within restricted visual fields of Deaf-Blind persons, should be contracted. Non-certified interpreters and other professionals in Deaf-Blindness who are skilled in the communication mode used by the individual Deaf-Blind person needing interpreter services, may interpret when appropriate. In all interpreting assignments, the person in the role of the interpreter should be and/or become familiar with and follow the ethical practices advocated by the RID Code of Ethics.

The **interpreting assignment** may vary considerably in attempting to meet the individual and unique needs of Deaf-Blind persons, and the responsibilities of the interpreter may consist of factors not generally considered by the interpreter for deaf persons.

However, the following factors **would** be within the role of the interpreter for Deaf-Blind persons. The interpreter may be responsible for the **mobility** requirements of the Deaf-Blind person. These may include transportation to and from a residence and/or meeting; maneuvering in and around a room; seating; awareness of architectural barriers; and arrangements for restroom facilities. Interpreters will need to familiarize themselves with the **physical aspects** of the interpreting setting and, after consulting with the Deaf-Blind person, make decisions on appropriate seating arrangements to enhance use of residual vision. Poor seating arrangements may limit mobility for emergency needs, and may increase fatigue and discomfort for both the interpreter and the Deaf-Blind person when using tactile communication. Good lighting is essential for general communication purposes, and especially for the Deaf-Blind person who attempts to make optimal use of residual vision.

The interpreter may be responsible for **supplying information** about the physical characteristics and occupants in the room or setting, and in effect become not only the "ears" but the "eyes" of the Deaf-Blind person.

Appropriate clothing and colors should be worn by the interpreter to enhance the contrast between clothing and skin color, particularly when interpreting for Deaf-Blind persons with Usher's Syndrome or macular degeneration.

The **length** of the interpreting assignment should be taken into consideration, and prior arrangements made for relief interpreters to reduce fatigue and stress.

The interpreter may be responsible for **social encounters** that the Deaf-Blind person may want to participate in during meetings. These may include lunch, coffee breaks, and receptions; and interpreting should be arranged to avoid awkward situations in mobility and communication.

Above all, the interpreter should be knowledgeable of and adhere to the **RID Code of Ethics**, respect the rights of Deaf-Blind persons by remaining objective and maintaining confidentiality, and avoid advising, criticizing, counseling, deleting and/or adding information within the interpreting assignment.

Interpreter Competencies

In view of the scarcity of interpreters for Deaf-Blind persons, pre-service and in-service training for staff becomes a viable alternative. Ideally, certified interpreters for the deaf, or skilled professionals in Deaf-Blindness should be provided with on-going training workshops to develop the skills necessary to interpret for Deaf-Blind persons. Training programs should develop the following skills in interpreters:

1. Ability to communicate fluently in tactile and visual American Sign Language, manual English systems, and fingerspelling.
2. Ability to communicate using print-on-the-palm.

3. Ability to use the Teletouch machine, and an understanding of the various methods of braille communication.
4. Ability to use and have knowledge of various writing aids, and closed circuit T.V.
5. Understanding of, and skills in guide techniques for blind and Deaf-Blind persons.
6. Understanding of the implications of the aural/oral method.
7. Understanding the communication methods most appropriate for the individual Deaf-Blind person based on: age of onset of disabilities, language capabilities, and other physical capabilities.
8. Knowledge of the impact of Deaf-Blindness on the life experiences, communication needs, and personal-social needs of Deaf-Blind persons.

C. Other Methods, Aids, And Devices

The following section identifies and describes other **selected** communication methods, aids, and devices that have been developed to enable Deaf-Blind persons to make optimal use of residual vision, residual hearing, and the tactile sense, and is not mean to be all inclusive.

1. Visual

a. **Writing:** Deaf-Blind persons with residual vision can use writing for expressive and receptive communication. Written messages for Deaf-Blind persons should take into consideration the degree of the visual impairment, which format and print size will be most effective, and the Deaf-Blind person's preferences. Printed and/or cursive messages should be written in a size comfortable for readability with magic markers or pens which are darker and more visible than pencil. Sentences should be modified for simplicity and ease of reading.

b. **Line Guides:** Guides that have opening(s) the standard length and width needed for signatures, checks, envelopes, etc. enable the Deaf-Blind person to visually and/or tactually guide their writing on any line.

c. **Large-Print Materials:** Large print materials, including books and newspapers that are photographically enlarged to 18 point type can be purchased from a variety of publishers. The print is usually on off-white or buff-colored paper. Many persons with residual vision can read this type, or may use magnifiers to enhance readability. Typewriters that produce large-type are also available.

Example of Large-Print

This is 18 Point Type

d. **Magnifiers:** Magnifiers range from 2X to 20X, and can be hand-held, stationary, with platforms, self-illuminating, loupes attached to glasses, and microscopic lens systems. The low vision specialist and the Deaf-Blind person can best decide which types of magnifiers are most appropriate.

e. **Closed Circuit Television System (CCTV):** Closed-circuit television systems can be either stationary or portable with a monitor and camera that enlarge and present a high contrast image of the printed page, photographs, or objects. The material or object is placed under the viewing camera which can then magnify from 4X to 45X. Images on the screen can be reverse-video depending on the reader's preference and visual capabilities.

f. **British Two-Hand Manual Alphabet:** This alphabet was developed in Great Britian, and is used primarily by members of the Commonwealth. This alhabet uses **both** hands to represent the letters of the alphabet, and numbers.

The tactile mode modifies its usage by having the Deaf-Blind person keep one hand stationary, while the speaker places his/her hand in the appropriate position on the Deaf-Blind person's hand.

BRITISH TWO-HAND MANUAL ALPHABET

g. **Telecommunication Devices for the Deaf (TDD, TTY):** These devices operate on the same principle as teletype machines. The telephone headset is placed on a coupler attached to a stationary or portable teletype machine. The typed message is then transmitted through the telephone line to a similar receiving device.

h. **Speechreading (Lipreading):** For Deaf-Blind persons with residual vision, speechreading can provide useful information for speech reception. However, only 30-40% of the English language is visible on the lips, and spoken language moves quickly and is less carefully structured and predictable than the written language. Several factors which reduce the ability to effectively lipread should be taken into consideration and avoided:

(1) Exaggerated lip movements
(2) Poor lighting
(3) Obstruction in and around the mouth area such as beards, moustaches, pipes, cigarettes, gum, and food
(4) Complicated and verbose sentences
(5) Overly rapid speech
(6) Distances of more than 5 feet between the speaker and lipreader

2. Auditory

a. **Hearing Aids:** Individual hearing aids fall into three general categories: body aids, post-auricular aids, and aids that fit directly into the ear canal. The audiologist can best determine the type of aid and amplification needed for the hearing-impaired individual. All hearing aids function by the same principle: acoustic energy enters the microphone and passes through the transmitter where it is converted to electrical energy; it is then amplified by power from a battery, and is converted back into sound at the receiver.

A note of caution, hearing aids can only amplify residual hearing; they cannot correct hearing losses, distortion in hearing, nor restore sensitivity to damaged nerves.

Group hearing aids and induction loop systems are generally used in schools and programs for hearing-impaired children, and in theaters and many social halls where hearing-impaired individuals may gather. They generally consist of one or more microphones, an amplifier, and a number of individual receivers.

b. **Kurzweil Reading Machine:** The reading machine is a device that translates the printed page into the spoken word, especially useful for the person with good residual hearing. A synthetic voice "reads" the material a few minutes after a scanning mechanism locates the first line. A period of training is necessary to become accustomed to the electronic voice.

c. **Visual/Tactile Speech Indicator:** The indicator is a portable device that is coupled to a telephone receiver to visually display or vibrate signals on a highly sensitive meter. The device must be calibrated with the telephone dial tone, and the Deaf-Blind person can communicate by

asking questions through speech that can be answered by "yes" or "no". The key words used by the person on the other end are: NO, YES YES, PLEASE REPEAT, HOLD IT HOLD IT HOLD IT. The indicator displays or vibrates whether one, two, three or six syllables are spoken, enabling the Deaf-Blind person to give appropriate responses. The meter is also sensitive to the volume of the response, dial tones, and busy signals.

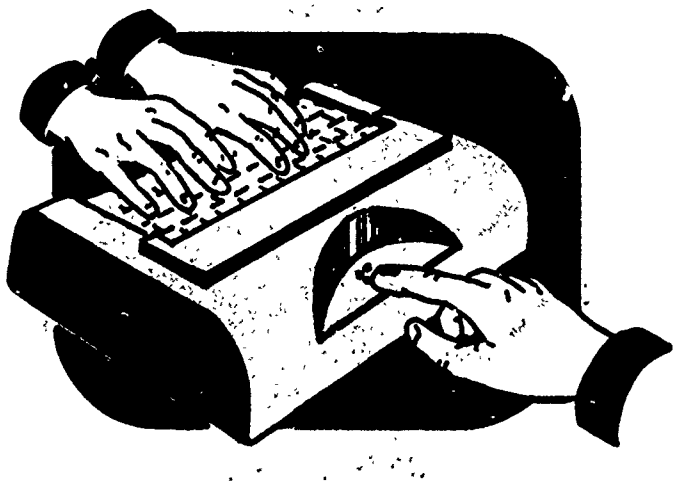
d. **Talking Books:** For the Deaf-Blind person with sufficient residual hearing, recorded books, and other materials are available on records, or cassettes free of charge.

e. **Telephone Amplifiers:** There are two types of amplifiers available that enhance the understanding of speech through the telephone. One type of amplifier is built into the telephone headset, and the other is attached to the telephone. Both have dials that can be adjusted from lowest to highest amplification, and are available at telephone center stores.

f. **Computer Voice Output Systems:** Deaf-Blind persons with good residual hearing can use systems like the Kurzweil Talking Terminal, which converts computer-transmitted, standard English text into synthetic speech. As with all electronic synthetic voices, a period of training is necessary to become accustomed to it.

3. Tactile

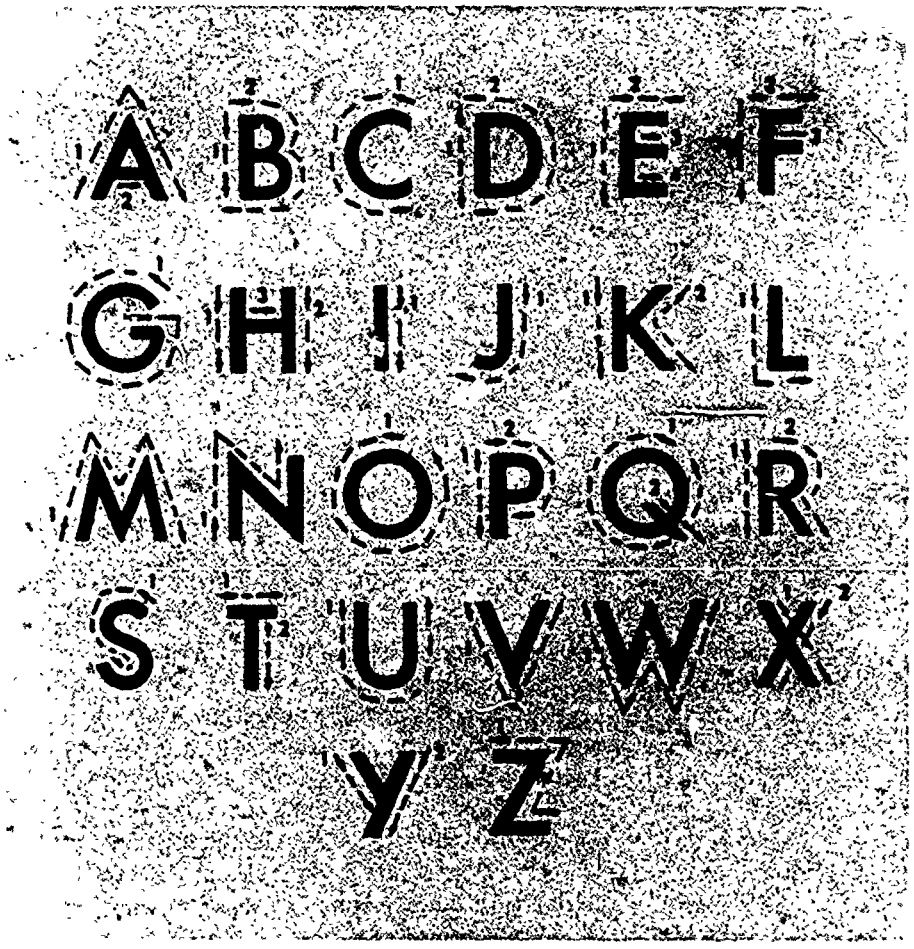
a. **Tellatouch:** The Tellatouch is a portable device that is similar to a typewriter. It has a standard keyboard; as well as a set of keys corresponding to a Braille writer. No copy is produced on paper. As each key is depressed, a braille cell is activated on the other side of the Tellatouch, which is read by the Deaf-Blind person. Only Grade 1 Braille can be used by the sender on the typewriter keyboard, however, Grade 2 Braille can be used when the Braille keys are depressed. The Deaf-Blind person must have good Braille reading skills, and the sender have adequate typing skills.



TELLATOUCH

b. **Print-in-the-Palm (Block Printing:** This is a tactile form of communication and the palm is used as the writing surface. The speaker holds the Deaf-Blind person's hand and prints (using the index finger) the letters of the alphabet to form words and sentences. The end of a word is indicated by the speaker's hand being placed flat on the receiver's hand. Mistakes are corrected by rubbing the receiver's hand, as if erasing the word. The same procedures can be used for printing on other parts of the body, usually the arm, if the person's palm is not sufficiently sensitive.

Alternate Method



BLOCK PRINTING

c. **Braille Hand Speech (Braille Manual, Braille-in-the-Hand):** The Braille code is represented manually into the Deaf-Blind person's palm, or on the arm. The speaker can simultaneously use the index, middle, and ring fingers of both hands to represent the six dots in an imaginary cell, or use the index finger to consecutively form the dots that represent each letter Grade 1 or Grade 2 Braille. The Deaf-Blind person feels the formation of the dots, and "reads" the words. This method is widely used by persons who become blind early in life, and lose their hearing in adult life.

BRAILLE HAND SPEECH

d. **Telebraille:** For Deaf-Blind persons who are fluent in Braille, a new device is available that enables two Deaf-Blind persons to communicate via the telephone. This device is acoustically coupled to the telephone headset. The keyboard resembles a typewriter keyboad, and has corresponding braille keys. On the receiving end, a Braille cell is activated which is "read" by the person receiving the message. It can be connected with a TTY/TDD and messages typed can be read in Braille by the Deaf-Blind person. It also can be used in face to face communication without a telephone. A visual read-out can be connected for the sighted person.

e. **Braille Computer Terminal for the Blind:** The keyboard is similar to that used by teletype machines. Braille characters are embossed at the rate of 10 per second. This system is primarily used as an input or output station for data processing, and opens up job opportunities in the field of data processing.

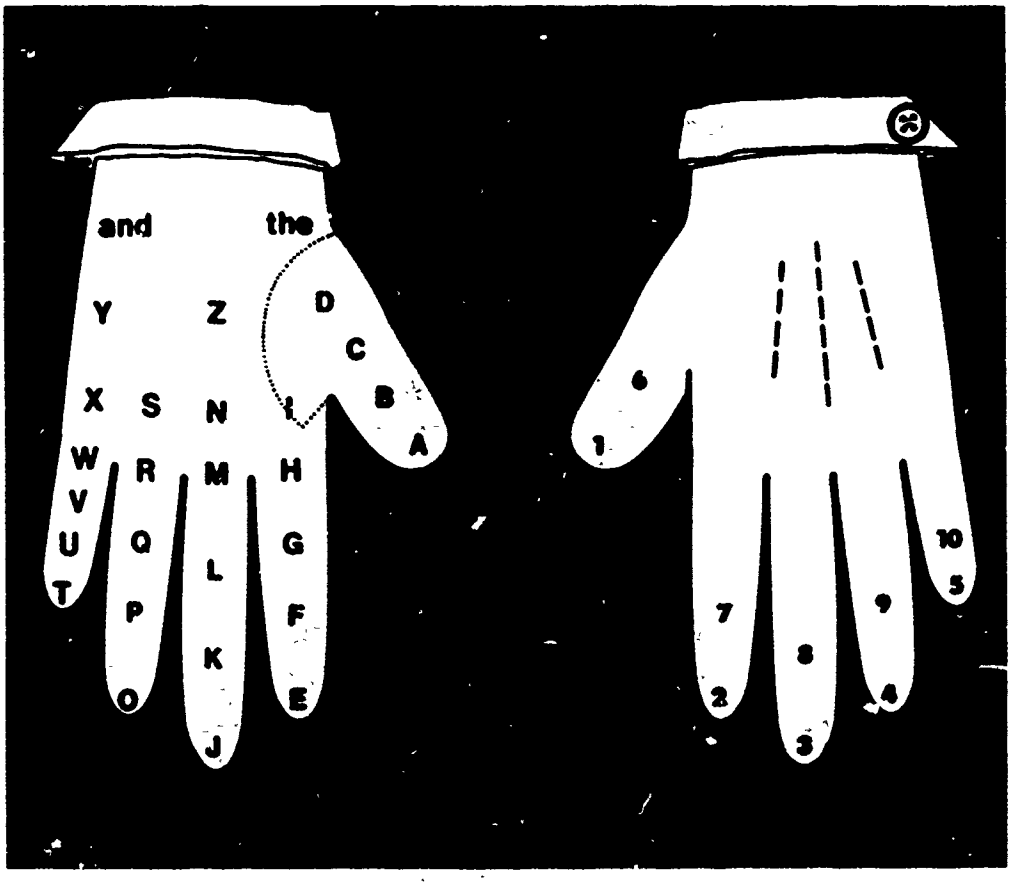
f. **Braille Alphabet Cards:** This card has printed letters of the alphabet with the corresponding braille characters below it. The speaker places the Deaf-Blind person's finger on the appropriate letter, and spells out words. The Deaf-Blind person must know braille.

g. **Raised Line Drawing Kit:** The drawing kit is covered with rubber to which polyester, or mylar plastic sheets are attached. A ballpoint pen filled with a colorless lubricant, or a sensory quill is used to do the actual writing. The message is "read" by the Deaf-Blind person because the pen raises impressions which are easily followed by touch.

h. **Alphabet Glove:** The alphabet glove is a thin, white or light-tan glove on which the letters A to Z, the numerals 0 to 9, "the" and "&" have been printed with indelible black ink. Fill the numbers are indicated on the fingertips and joints, on the back of the glove. The letters are indicated on the palm side of the glove along the joints, tips, and bases of the fingers.

The glove is usually marked while on the Deaf-Blind person's hand, to assure fit and proper location. The Deaf-Blind person memorizes the position of the letters, numerals, and words. The speaker spells words by touching the letters in succession on the glove.

ALPHABET GLOVE



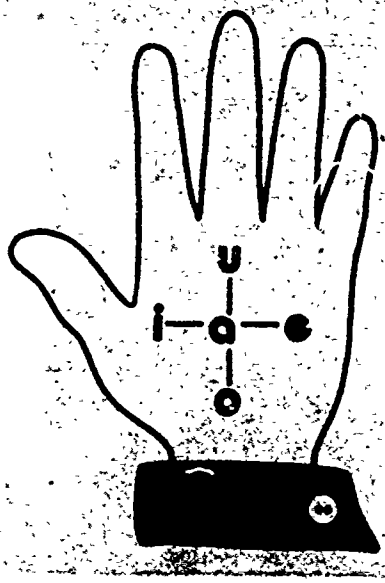
i. **Alphabet Plate:** The alphabet plate is a lightweight plastic plate that measures 4– × 6 3/8–, and is embossed with the capital letters of the alphabet, and the numbers 0-9. The speaker places the Deaf-Blind person's finger on the appropriate letters in succession, and spells out words. The Deaf-Blind person must know the formation of print letters.

j. **Cross Code:** The cross code was developed by a Deaf-Blind man for his own use. Deaf-Blind people frequently develop their own methods of communication which are then adopted by others. The back of the receiver's hand is divided into four sections. Each end of the imaginary cross and the center of the hand is used to indicate letters. The letters are based on a series of taps and strokes, and are grouped according to the vowels: a,e,i,o,u.

CROSS CODE

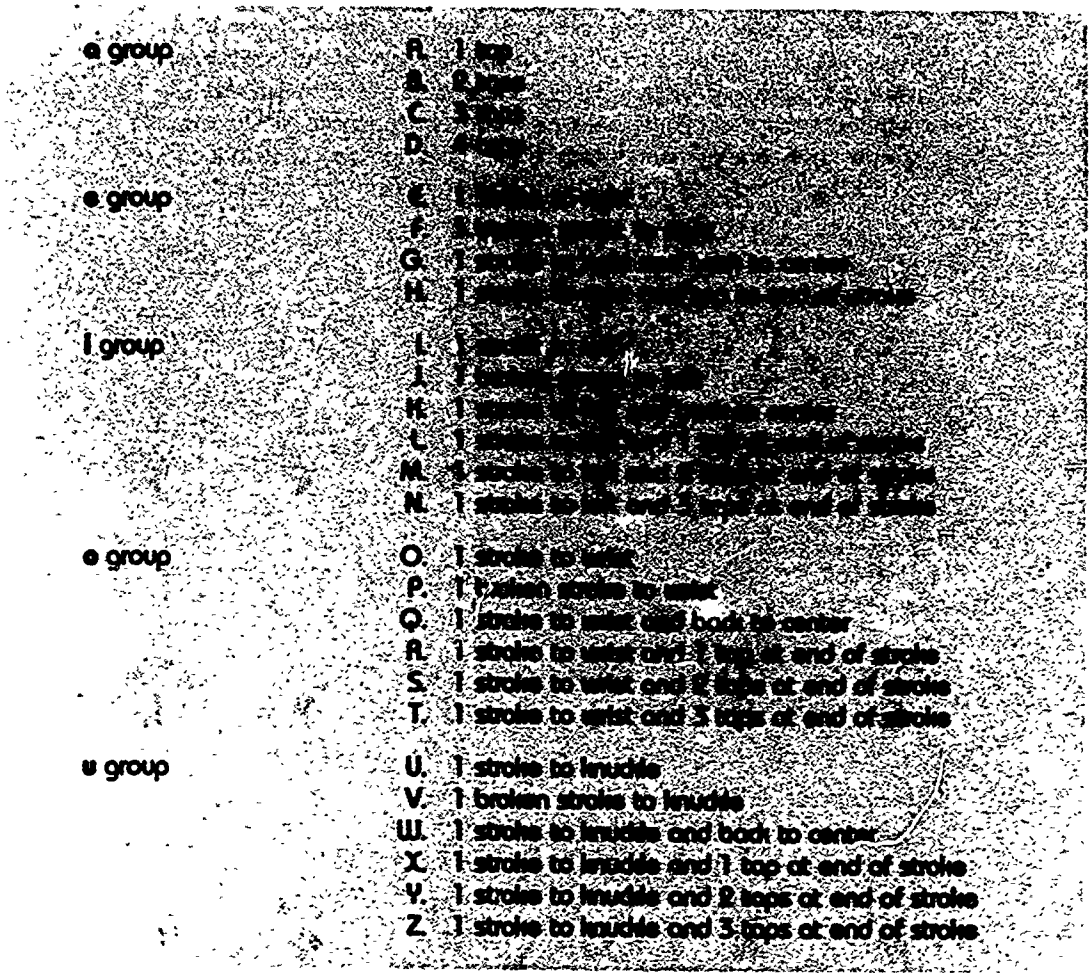
Group	Location
a	Center of the Hand
e	To the Right
i	To the Left
o	Toward the Wrist
u	Toward the Knuckle of the Middle Finger

CROSS CODE LOCATION

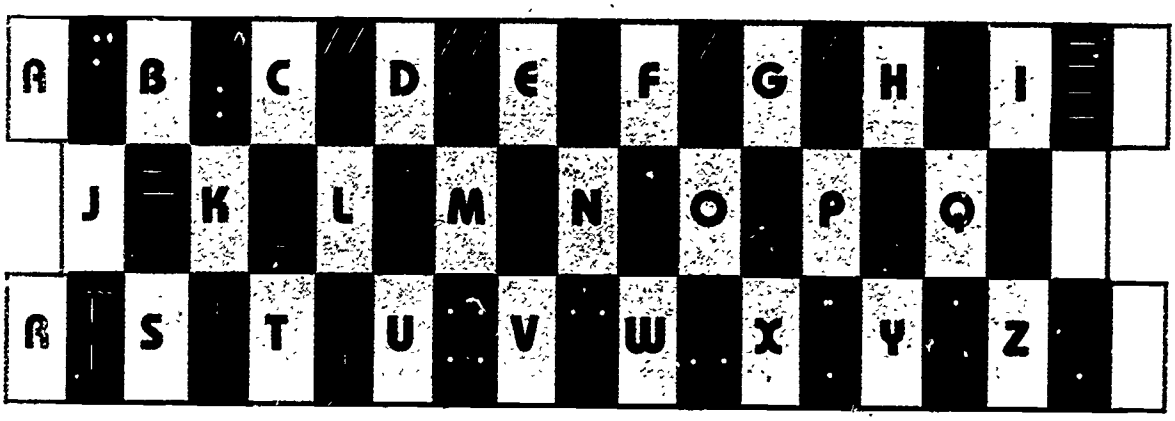


Additional Cross Code Signals
(made on a different part of the body to avoid confusion)

"Yes"	1 tap
"No"	2 taps
"I don't know"	3 taps
Quotation marks	circle

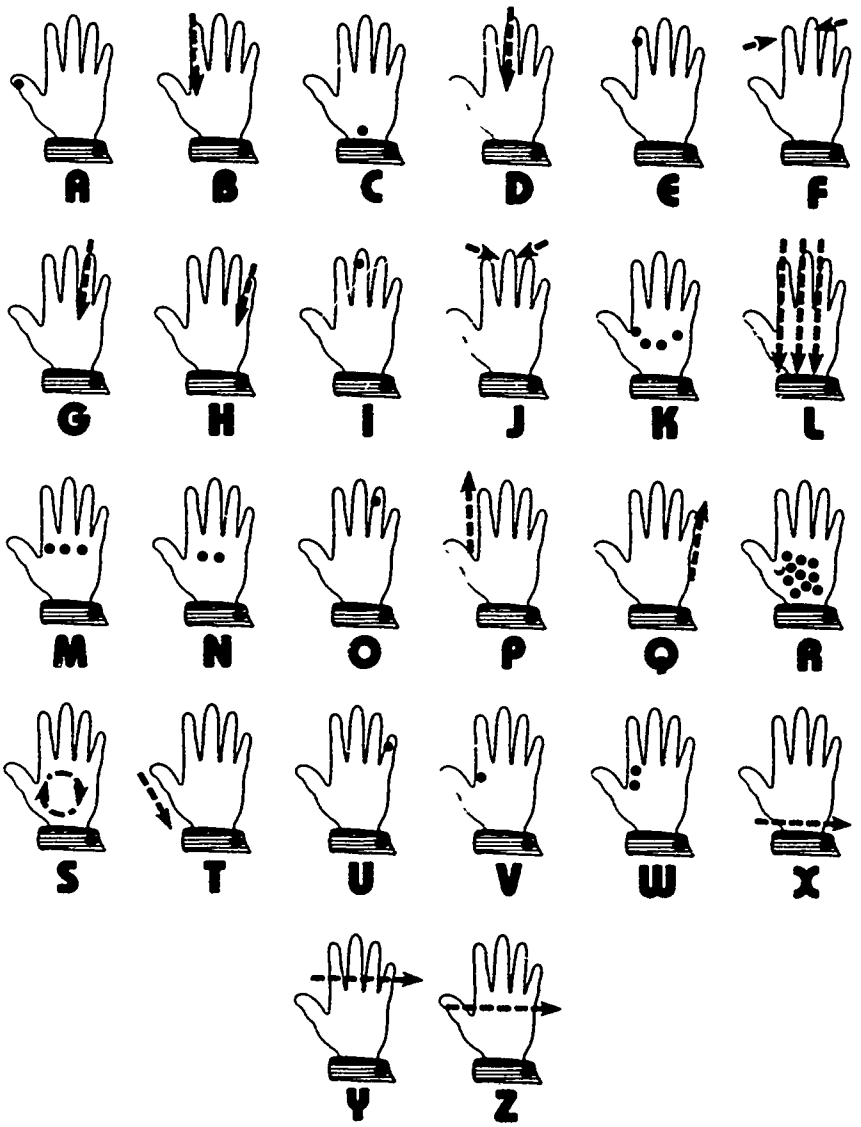


k. **Fishburne Alphabet for the Blind:** This method was found to be useful for Deaf-Blind individuals who have difficulty in learning braille, or who do not know braille. Characters which represent the letters of the alphabet, and are much easier to feel, are embossed on 1/2- wide Dymo tape which is cut into 1- long strips. Its uses are limited, but it provides a means of recording everyday information such as addresses, telephone numbers, and labeling of foods and clothing.



FISHBURNE ALPHABET

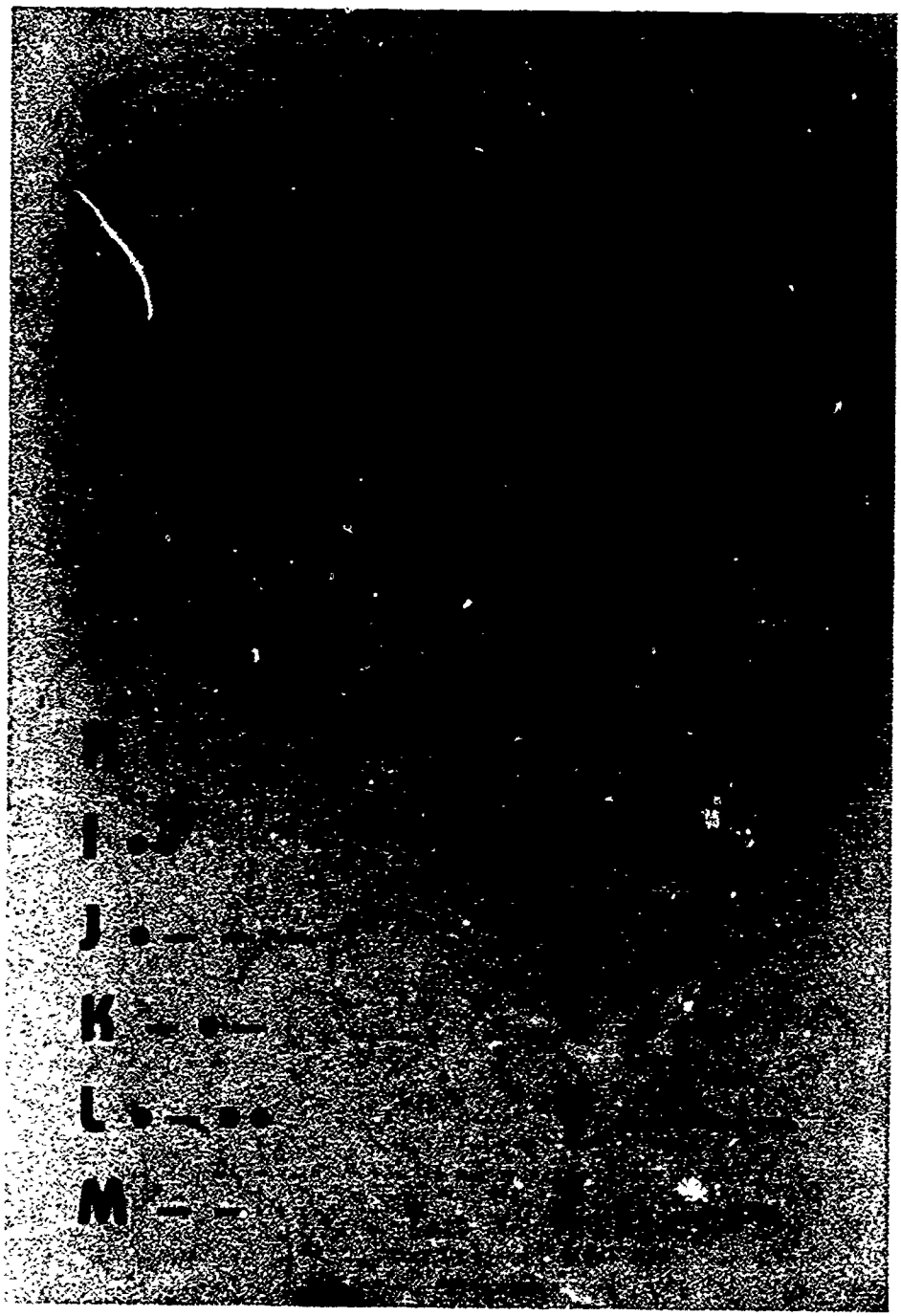
1. **Lorm Alphabet for the Deaf-Blind:** The Lorm Alphabet is a tactile alphabet developed for use with Deaf-Blind persons. It is primarily used in Europe. Different locations and movements on the hands are used to represent letters. As with the tactile British two-hand alphabet, the Deaf-Blind person's hand is stationary, while the speaker uses one or more fingers to touch the appropriate locations on the Deaf-Blind person's hand to spell out words, and/or sentences.



SYMBOLS

- • touch the location indicated with the tip of one finger
- •• (or more) touch the location indicated with the number of fingers displayed by the number of dots
- ---→ move the tip of one finger across the location in the direction indicated; when the arrow is next to the hand, the fingertip should move along the side of the hand rather than across it
- ⇊ move the whole hand across the reader's hand in the direction indicated
- →← squeeze the fingertips indicated together

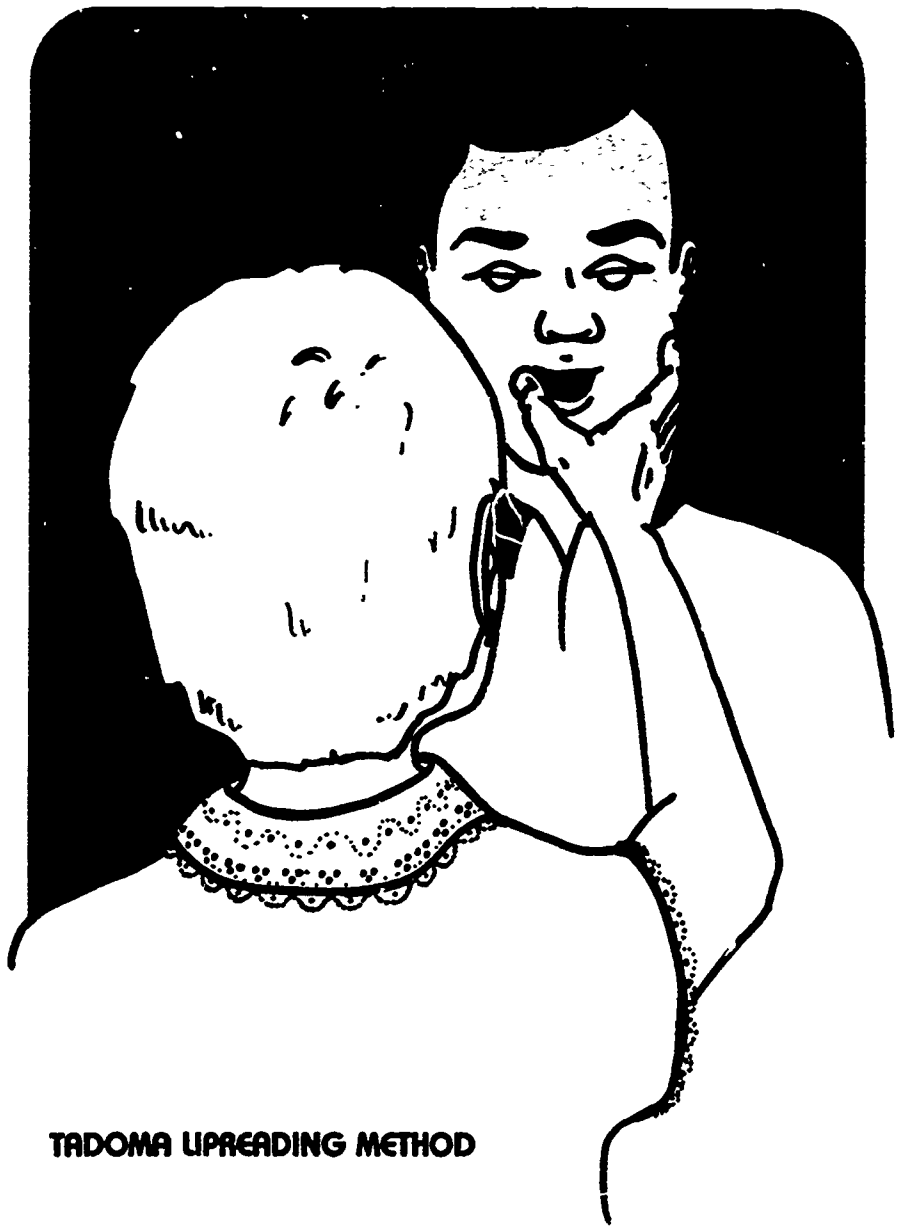
m. **International Morse Cord:** Morse Code is a system of dots and dashes that represent each letter of the alphabet. Although it is a code that uses the auditory system, it can be tactually adapted for use in communicating with Deaf-Blind persons. On the palm or on the arm, a dot is represented with a tap, and a dash with a stroke of the speaker's index finger. For communicating at a distance, it can be adapted for use with a vibrator, and a dot will be a shorter interval than a dash.



MORSE CODE

n. **Tadoma (Tactile Speechreading, Vibration Method, Alcorn Method, Tactual Lipreading):** Tadoma, named after two Deaf-Blind children, Ted and Oma, is a system developed to receive speech through the sense of touch. The Deaf-Blind person places his/her hand on the face of the speaker with the thumb touching the lips and the other fingers spread over the cheek, jaw, and throat. As speech is produced, the thumb feels the lip, jaw, and tongue movements while the other fingers detect vibrations in the nasal and throat areas.

This method requires extensive training and skill on the part of the Deaf-Blind person. It can also be used as a supplementary tool for individuals who have some residual vision.



TADOMA LIPREADING METHOD

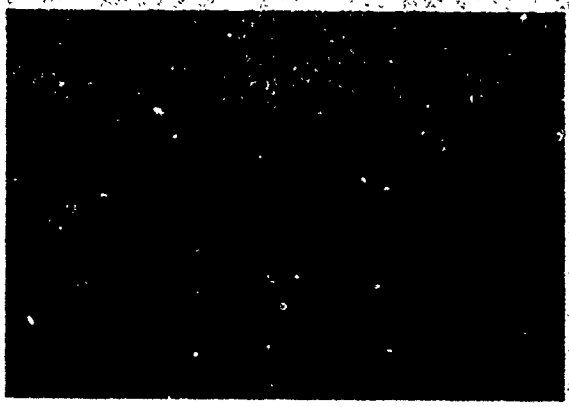
o. **Communication Boards and/or Conversation Boards:** Boards can be tactile or visual. Letters can be cut out of cardboard, wood, plastic, or magnetic felt to form messages. Modifications can be made by using drawings, pictures or other augmentive communication modes. Standardized conversation boards are available that have the letters of the alphabet, the numbers 0-9, twenty key words (i.e., was, what), the $, and ¢. Below each one are the corresponding Braille characters. The speaker places the Deaf-Blind person's finger on the appropriate Braille cell to form words. If the Deaf-Blind person doesn't speak, she/he can point to the appropriate Braille characters, and the sighted person can read the printed letters.

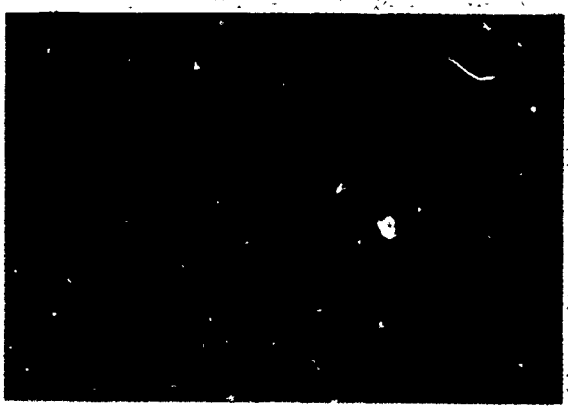
Also available is the ZYGO Model 16, a personal communication board that has 16 message display areas measuring 4" × 3" each. Messages are displayed in each area on interchangeable thin film panels used as overlays. The Deaf-Blind person with residual vision can have a bright signal light at the far left, which can be moved manually or automatically to the appropriate message display area.

p. **Tactile Communicator:** This device uses a "pocketsize" receiver, and a transmitter about the size of a clock radio. The transmitter can be installed permanently at a work site and/or in the home, and sends out radio signals that are felt as vibrations by the person carrying the receiver. Codes using varying sequences of vibrations are used to indicate a fire alarm, telephone ringing or a doorbell. Household devices, such as smoke detectors, baby cry signals, and timers can be hooked into the channels on the transmitter.

q. **Versa Braille (Brailley, Paperless Braille):** A device that translates a printed text into Braille. Instead of dots embossed in paper, pins the diameter of braille dots are arranged in groups of six like the dots in a braille cell and are moved up or down under the control of information stored in a tape cassette. A raised pin shows the presence of a dot, while a retracted pin means the absence of a dot. When reading, the visually impaired person runs his finger along a row of pins as he would when reading ordinary braille. At the end of the line, he touches a switch that causes the device to quickly re-position the pins to display the next line of text. The information is "brailled" electronically onto the tape by using six keys and space bar similar to those on a regular braillewriter.

PAPERLESS BRAILLE





At a time when
all human service programs
are faced with
diminishing resources
to serve an often
increasing population,
it may seem ironic
that there is attention
toward expanding services to
another potential major
disability group.

Yet history has shown that
the vocational rehabilitation
(VR) program has become
a social force
in the development
of handicapped workers by
making significant changes
at key times.

Ninth IRI
Rehabilitation of Clients
With Specific Learning Disabilities
1982

Administrative Issues

Objectives

1. To identify administrative issues affecting the delivery of rehabilitative services to Deaf-Blind individuals.
2. To identify legal and legislative issues affecting the delivery of rehabilitative services to Deaf-Blind individuals.
3. To identify program management issues of Deaf-Blind programs.

Summary

The goal of a rehabilitation agency serving Deaf-Blind individuals is to facilitate the Deaf-Blind client's maximum development as an integrated working member of society. At the operational level, the agency's goal is to provide each Deaf-Blind person an individualized written rehabilitation program (IWRP) designed to meet the individual's needs, interest, abilities, and present level of functioning, delivered at the rate, in the depth, and by the methods best suited for the enhancement of the employability of the Deaf-Blind individual. These program goals are not different from those of other clients of a rehabilitation agency. Like other groups of people with severe disabilities, there are many Deaf-Blind individuals who live independent lives as contributing members of society. All but a very small minority of Deaf-Blind individuals can benefit from rehabilitation services. Those Deaf-Blind persons who require institutional care can be taught to function as responsible and respected members of that community through independent living services.

Knowing where to start with the development of a rehabilitation program for Deaf-Blind people is one of the most difficult questions to answer for professionals and consumers alike. As McInnes and Treffry (1982) have cautioned, tried and true approaches which have worked with people with other disabilities seem less effective when employed with people who are Deaf-Blind. Effective programs for this population can not be developed by basing the programs on knowledge of a few specific techniques and methods used with Deaf-Blind persons. An effective program must contain a comprehensive array of services. At the same time, some of the administrative issues of programs for the Deaf-Blind population require responses which are similar to as well as appropriate for other groups of people with disabilities. A review of the specific and general administrative issues affecting the delivery of rehabilitation services to Deaf-Blind persons follows.

Discussion

Executives or administrators of rehabilitation agencies, in contrast with political leaders, often lack reliable political and institutional support and depend on agency resources, such as budget and staff, and their own talent, character, ability, popularity, and prestige to achieve administrative goals (Burns, 1979). Because of the myths and challenges of providing quality services to Deaf-Blind individuals, the rehabilitation administrator will need to employ both agency and personal resources in planning, implementing and maintaining a rehabilitation program which meets the needs of Deaf-Blind persons. The administrator will need to be able to demonstrate not only personal commitment to serving Deaf-Blind persons, but also how the provision of services to Deaf-Blind persons compliments both agency and staff goals and values. Because of the resource and time demands a Deaf-Blind client requires, the administrator must also be an advocate of services to Deaf-Blind persons.

Administrative demonstration of personal commitment for Deaf-Blind services could begin, for example, with the administrator's appointment and chairing of a task force on the development of an agency plan to serve Deaf-Blind individuals. Establishing communication with a Deaf-Blind person can also be a symbol of a sensitive and committed administrator for both agency staff and consumers. After the administrator's personal commitment and its accompanying influence has been established, the administrator can then initiate responses which demonstrate agency commitment to quality services. The

administrator could, for example, establish the provision of services to Deaf-Blind individuals as a service priority, set aside resources to support the priority area, review current services, or initiate the development of comprehensive service plans for Deaf-Blind individuals.

Administrators might also consider other leadership tasks that would demonstrate both personal and agency commitment. For example, an administrator might establish or work with an intrastate or regional network of consumers and providers of services to Deaf-Blind people. The Helen Keller National Center (HKNC) Regional Representative is a valuable resource for an administrator wishing to work with other professionals and agencies in the field of Deaf-Blindness. In 1976, there were ten Regional Centers for Deaf-Blind Children (Dantona, 1977). Because of federal legislative changes, the role, number, and scope of these centers has been reduced; however, the networks established during the more active periods of these centers might be a valuable resource for a rehabilitation administrator wishing to build on the experiences of others in the field and who share similar goals for Deaf-Blind persons. An administrator might also choose to involve organizations of Deaf-Blind persons in the agency's advisory council. A meeting with Deaf-Blind persons to discuss their service needs and their impressions of the quality and array of services available from the agency is a task an administrator could consider. The staff development specialist might also be asked to plan a training conference on Deaf-Blindness which involves agency staff, consumers, and staff from community agencies likely to serve Deaf-Blind persons.

The Kansas P.L.A.N. (Participative Life-Long Plan for Affecting Needs) for Deaf-Blind project (Kelly, Eye, Gottula & Friedman, 1981) provides an example of an approach for providing the coordination of services to Deaf-Blind individuals and their families. The Kansas P.L.A.N. represents the efforts of one of several states which "...has had a history for zealously seeking services for the Deaf-Blind population" (Kelly et al., p. 5) This state's history of seeking services for Deaf-Blind persons is an example of how administrative leadership can effect the delivery of rehabilitative services to a population which may have been underserved by private and public rehabilitation agencies.

Legal Issues Affecting the Administration of Deaf-Blind Programs

There are relatively few statutes, judicial rulings, and administrative processes dealing specifically with the rights, protections, services, and programs for the Deaf-Blind population. However, the administrator's need to know extends beyond the legal issues specific to Deaf-Blind persons, to issues affecting all groups of people with disabilities. Space limitations prevent a discussion of the state of law as it now affects all disabled persons. This duscussion rather will focus selectively on selected provisions of state and federal legal issues that have the greatest applicability to Deaf-Blind persons and rehabilitation agencies which work with this population.

Legislative action rather than litigation has been the major impetus for change in the rehabilitation system. The Rehabilitation Amendment of 1984 (P.L. 98-221) provides the current legal authority for the state-federal rehabilitation program. Its emphasis on services to severely disabled people and its independent living rehabilitation title provide a legal basis for the provision of an array of comprehensive services to Deaf-Blind persons.

With the enactment of the Rehabilitation Act of 1973, language in Section 102 mandates that the rehabilitation agency provide due process, a legal right under the Fourteenth Amendment, to all disabled persons including those who are Deaf-Blind. Development of the IWRP which is mandated by Section 102 requires full participation of the Deaf-Blind person or guardian. The IWRP, "...a contract...for services and client participation in program planning" (Laski, 1977, p. 285), raises complex legal questions when applied to Deaf-Blind clients with whom counselors and other service providers may not be able to communicate. The administrator, in order to assure that due process is provided the Deaf-Blind person in development of the IWRP and subsequent IWRP decisions must, like the courts and hospitals, accommodate the communication needs of Deaf-Blind persons. One resource an administrator might choose to employ in this process is a Client Assistance Project or Independent Living Center. To assure that the Client Assistance Project or Independent Living rehabilitation program is a valuable resource for the agency and the Deaf-Blind person, the administrator may wish to encourage the Client Assistance Project or Independent Living Center to address the needs of the Deaf-Blind population in its program.

Title V of the Rehabilitation Act of 1973 contains provisions which grant Deaf-Blind persons and their advocates rights to employment, transportation, and public buildings which are well known to rehabilitation administrators. There are a number of parallels between the language and legislative history of Title V of the Rehabilitation Act of 1973 as amended and Section 601 of the Civil Rights Act of 1964 and Section 901 of the Education Amendments of 1972 (Laski, 1977).

Because Deaf-Blind persons' vocational potential ranges from highly supervised, nonproductive sheltered work to advanced skill-trades and professional positions (Smith, 1974), three types of laws are relevant to the employment of Deaf-Blind persons (Laski, 1977). The three major types of laws that are relevant are:

1. Laws that secure equal access and opportunity for handicapped persons in the competitive labor market. An example is the Rehabilitation Act of 1973 (29 U.S.C.A., Section 79).

2. Laws that provide some protection or special opportunities for handicapped workers through supported or subsidized work or legal incentives to hire handicapped persons. Examples include the Randolph-Sheppard Act (20 U.S.C.A., Section 107), the Wagner O'Day Act (41 U.S.C.A., Section 46), and the Small Business Act (15 U.S.C.A., Section 636 (h)).

3. Laws that regulate noncompetitive employment and work activities of handicapped persons in sheltered settings. An example is the Fair Labor Standards Acts (F.L.S.A., 29 U.S.C.A., Section 214) and the Rehabilitation Act of 1973 as amended (Laski, 1977, pp. 286-288).

Because judicial decisions affect the interpretations and implementations of the various state and federal laws regarding the rights of disabled people, the administrator needs to be a subscriber to services such as **Handicapped Americans Report** which regularly report on judicial, legislative, and regulatory issues affecting disabled people and rehabilitation programs.

Program Management

Organizational Issues

In most states, there are a substantial number of agencies and organizations which may provide direct or indirect services to Deaf-Blind individuals. Some of these service providers respond statewide while others respond locally or regionally. A likely result of this situation is service fragmentation rather than a service system which is "cooperatively designed, closely coordinated, refined, and more easily accessed by Deaf-Blind individuals" (Kelly, Eye & Tottulo, 1981). Designing a system which is coordinated, refined, and easily accessed is a likely administrative goal of most rehabilitation agencies. Reaching the goal can be achieved by several paths. Whatever path is chosen by the administrator will involve more than any one single agency because Deaf-Blind individuals potentially need the services of state agencies such as education, rehabilitation, labor, mental health, mental retardation, and transportation; local and regional agencies such as school districts, libraries, hospitals, housing authorities, and city and county governments; as well as individuals and private service providers such as physicians, taxi companies, contractors, and employers.

Four types of organizations or approaches have been identified by Kelly et al. (1981, pp. 140-141). The first three approaches, Agency/Client approach (State Related Group), Client/Advocacy approach (Independent-of-State Group), and Major Life-State Activity approach (Multiple Offices), were considered but not adopted by the Kansas P.L.A.N. because these approaches did not seem to satisfy the requirement that a life-long continuum of services to Deaf-Blind individuals and their families be coordinated, refined, and easily accessed (Kelly, et al., 1981). The Kansas P.L.A.N. is described as a systems approach and will be discussed after the first three alternative service approaches have been reviewed.

A. Agency/Client Approach (State Related Group).

The state related group approach contains at least three different organizational approaches. The first would be formed as an independent agency of state government created by the state legislature much like the present efforts for independent agencies serving hearing impaired persons. The second way to organize an office under this approach would be to create a subagency under the supervision of an existing state agency. A third way would be to establish a quasi-government, independent, not-for-profit organization which has been recognized by state and federal agencies through formal agreements and legislative approval and is able to contract on a non-bid basis and to accept grants. The sub-agency approach would employ an advisory group while the other two approaches have boards composed of representatives of provider agencies and client/users of Deaf-Blind services.

B. Client/Advocacy Model (Independent-of-State Group).

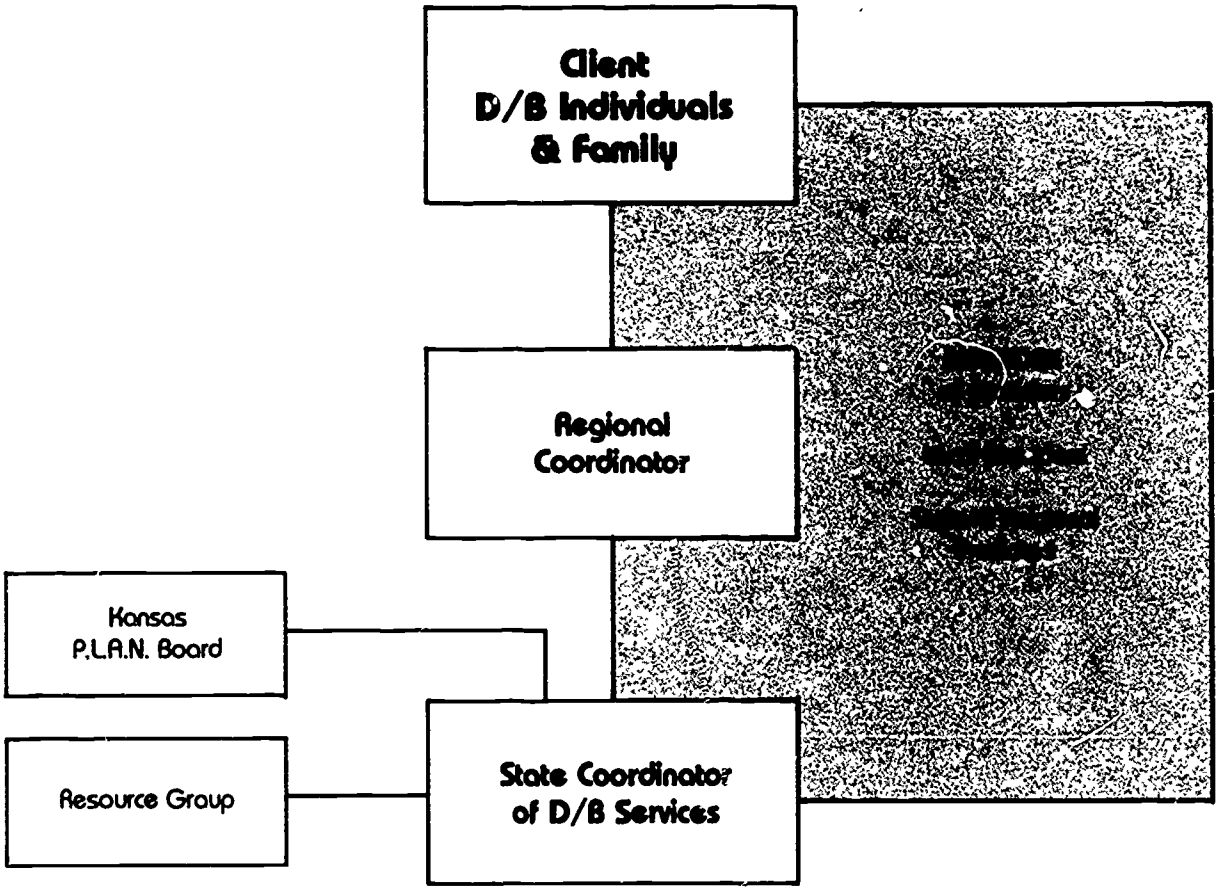
In this model, the planning and coordinating office is an independent, not-for-profit organization able to contract for and receive grants for providing planning and coordinating services for a client population. The organization would also seek approval for tax-deductible status (contributions). The controlling board of this group would be made up of Deaf-Blind individuals, guardians, parents, and representatives of advocacy groups. Agency representatives serve as an advisory group or an organizational resource group.

C. Major Life-Stage Activity Model (Multiple Offices).

In this model, the case management function would shift along several major agencies with the development and aging of the individual. For example, during the very early years (0-3 perhaps) Public Health might have responsibility for maintaining a file and managing the provision of appropriate services for very young Deaf-Blind individuals. They might also be charged with the preventative area, and all aspects of needs revolving about pregnancy, delivery, and case findings. Next, there might be an orderly movement of files into public education as the pre-school and public school years are reached. Education would then case-manage all individuals of this age and/or development level and be responsible for obtaining and coordinating all services needed. Case managers would need to monitor transitions. Because the population includes all ages, all involved agencies would have an office and responsibilities at any given time (Kelly, Eye, & Gottula, 1981, pp. 140-141).

D. Systems Model (Interagency).

Kansas developed a systems model to provide a comprehensive, life-long continuum of services for Deaf-Blind persons and their families. A central coordinating office administratively housed in the Office of Services for the Blind in the Kansas Division of Vocational Rehabilitation was designated to administer, plan, monitor, and make referrals to agencies within Kansas which had signed inter-agency agreements to provide specific services at any time along the life-long continuum. The central coordinating office was also responsible for developing a file on all identified Deaf-Blind clients and a compilation of service providers in order to match client needs and agency resources. A graphic model of the Kansas model system follows. Also included is an outline of the duties of the state coordinator of Deaf-Blind services and the regional coordinator (Kelly, et al., 1981, pp. 150-153).



The Kansas model identifies a **separate office** that can be held accountable for overall system operation. It allows for a central clearing house for both collecting and providing information; central monitoring and evaluation; and it provides the opportunity for better accessing the system (a single phone number, single address, and a knowledgeable person(s)). The structure also suggests an office or agent for coordination and a **coordinated network of service providers** that work together in a systematic, efficient, and effective way with minimal overlap or duplication (inter-agency agreements). The present service providers continue to provide the necessary service elements that allow for a comprehensive continuum of service options to all ages but within a system or network concept. Finally, the structure inserts the function of **client-centered case management** under a central office. Implied in this function is advocacy, planning, facilitating the accessing and delivery of services, and a continuous element that should work against the client's being forgotten or lost from the system. In further designing and detailing the structure of the central office, two primary considerations were raised: (1) the advantages of a single office or person to coordinate and (2) the need to have convenient easily identifiable case managers. Consequently, a central office was deemed necessary but with the added element of convenient regional case managers. The resulting structure assigned statewide coordination of provider and of case management to a single office but assigns actual case management to individuals in the field, i.e. closer and more convenient to the client. (Kelly et al., 1981).

Responsibilities and Role of Coordinators of Deaf-Blind Services

The role of the Coordinator of Deaf-Blind Services is to optimize the use of the limited resources to coordinate service across the state for Deaf-Blind individuals and their families and to coordinate the Deaf-Blind educational and awareness programs.

The responsibilities of the coordinator include:

1. To assist clients in accessing the service delivery system and in making contacts with the service center's coordinator.
2. To coordinate with the service center's coordinator to provide services for clients, especially when those services are available outside of their region or outside of the state.
3. To function as a "motivator" for establishing needed new services in the state.
4. To conduct inservice training for local service providers when necessary.
5. To conduct regularly scheduled and specially called board meetings for the purpose of modifying procedures and policies for coordinating services and to provide progress reports.
6. To work individually with state agencies to improve service provision to Deaf-Blind individuals and their families.
7. To disseminate current information.
8. To annually contact Deaf-Blind individuals to insure that current needs are being met.
9. To establish a data collection system for determining services needed, services provided, etc.
10. To function as a central clearinghouse for information and materials related to Deaf-Blindness.

Appropriate Service Agency

Depending upon the organizational structure chosen by the state, identification of which agency should serve the Deaf-Blind client may be an important, less than important, or, somewhere in between issue for administrators. The policy developed should be clear in any event and must meet the service needs of Deaf-Blind clients. Ideally, the agency identified as the primary service provider should be one that has access to the resouces needed by the Deaf-Blind person and relates to the Deaf-Blind person's disability identification. In states where state laws do not prohibit the practice, Deaf-Blind persons may well be served most appropriately by the agency serving the Deaf-Blind person's disability identity group. For example, if clients perceive themselves as blind persons with residual hearing, they should be served by the agency serving blind persons with consultation available from the deafness program/counselor. If, however, they perceive themselves as deaf persons with residual, non-deteriorating sight, they should be served by the agency/program serving deaf persons in cooperation with the blindness agency/program.

Service Provision Issues

Because of the low incidence rate of Deaf-Blindness, there are a number of issues affecting the provision of rehabilitation services to Deaf-Blind persons. Since organizational structure decisions could possibly minimize the impact of these issues, it is important that the administrator consider them in developing plans of services to Deaf-Blind persons. These issues include geographic accessibility, purchase or provision of services, staff-to-client ratio, time allotment, meeting the communication needs between agency staff and Deaf-Blind persons, and the extent to which the agency will meet the Deaf-Blind person's family's service needs. Intertwined among these issues are fiscal considerations such as the development of cost-effectiveness measures, staff costs, services costs, and amount of and length of service needs. Additionally, administrators need to be aware of the service issues confronting the Deaf-Blind specialist. For example, the Deaf-Blind specialist must have a relatively small caseload because of

the travel time required to meet with members of a low incidence population that may be widely dispersed across a service area.

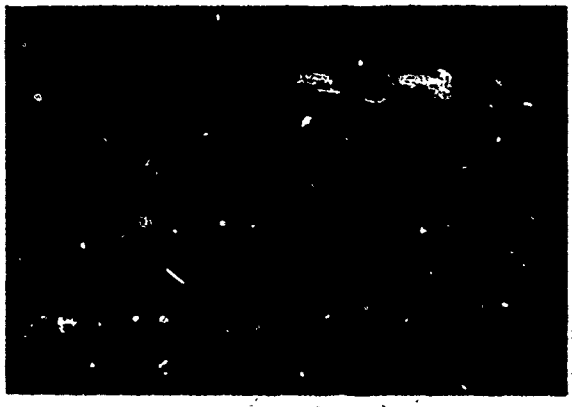
Staffing Needs

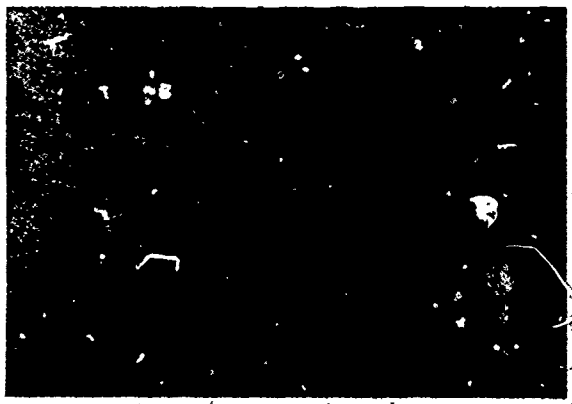
One of the chief tasks of the administrator will be to recruit appropriate service staff for a Deaf-Blind program or to be assured that the appropriate staff is available from cooperating agencies. Minimally, effective service delivery mandates that the agency have available a Deaf-Blind specialist, an interpreter, an independent living rehabilitation specialist, a consulting low-vision specialist, a consulting audiologist, and a placement specialist. These staff should be aware of local, state, and national resources which can be employed to assist the Deaf-Blind person in achieving his or her goals.

Staff Development Needs

Staff development needs extend in two different directions. The first direction is designed to meet the expectations, attitudinal and the supervisory needs of the staff providing services to the Deaf-Blind population. Direct service providers need administrative and supervisory support for their work. To meet this staff need, staff development activities will need to be designed to satisfy the information and attitude needs of supervisory and administrative staff. A possible resource for meeting both supervisory and direct service provider training needs is the Helen Keller National Center (HKNC) National Training Team. The HKNC Training Team has developed curricula in each of these areas. Administrators of staff development programs should contact HKNC directly for further information.

The second direction of the agency's staff development program will be to meet the specific training needs of the direct service provider. Included in an agency staff development plan, for example, could be communication skills training; devices, aids, and technology information training; resource identification and utilization training; and orientation to Deaf-Blindness. Strategies need to be developed as well which can be used to reduce burnout and turnover problems among Deaf-Blind direct service providers.





The need for the mobilization and coordination of community resources —those of both the professional and lay communities— cannot be overemphasized.

Lawrence and Vescovi
1967

A Continuum of Services for Deaf-Blind Individuals

Objectives

1. To acknowledge the continuum of needs from early identification, family support system, education, and vocational rehabilitation services to related human services programs.
2. To describe three statewide programs that present promise for a coordinated uninterrupted continuum of services to Deaf-Blind persons.

Summary

Deaf-Blind persons must accomplish the same developmental growth as other individuals. While no attempt will be made to summarize the literature on "normal" development (Piaget, 1952; Erikson, 1964; Bowlby, 1969), it is useful to conceptualize the development process in terms of identifiable transitions. In the case of the Deaf-Blind person these transitions most likely include:

1. from family/medical orientation and services to the system of education services.
2. from the system of educational services to rehabilitation,
3. from rehabilitatin to community based services.

Three statewide programs which have developed a continuum of services for Deaf-Blind persons are described. These programs illustrate cooperative efforts that facilitate the uninterrupted transition between and among various participating service agencies.

Discussion

Most of the children who are born with a severe disabling condition such as Deaf-Blindness are identifiable at birth. The degree to which an infant is either deaf or blind is often not easily assessed, however. If there is any question as to whether an infant is Deaf-Blind, the parents can contact the nearest Center for Deaf-Blind Children and Youth of the state in which they reside.

The combination of significant hearing and vision loss at birth generally creates delays in all areas of development and, without early and appropriate intervention, often imposes severe limitations on the child's language development, gross and fine motor skills, social responsiveness, and early effective ties with the parents. Appropriate intervention **always** relies on the active cooperation and collaboration of several intervention specialists (early childhood specialists, occupational and physical therapists, speech and language therapists, ophthalmologists, otolaryngologists, audiologists, psychologists and other mental health workers). Intervention must simultaneously focus on the attainment of developmental skills for the child **and** on the development of a communication system that will facilitate the parents' understanding of the child's needs and enable the child to meaningfully represent his innerfelt sensations and desires.

Early intervention must serve as the "bridge" between the family, medical providers, and later educational professionals. The successful early intervention specialist often plays a special liason role between the family and medical providers, serving as an outside observer, and consultant, to help the family to ask questions and assimilate information that will influence intervention efforts and affect care given at home.

The need for close communication between medical providers, educational professionals and the family does not stop when the child reaches school age. As early goals are developed for the child in a special education setting, it is vital that all professionals involved in the child's care be involved and aware of the established program. Likewise, the family must be active participants in the development of those goals and centrally involved in the carrying out of those goals through a close dialogue with teaching professionals. Parents need to be centrally involved in the creation of their child's Individualized Education Plan (IEP). Family members, medical professionals and educators all need to contribute to the

formulation of the IEP which should include short- and long-term goals, and should specify the educational and related services needed to attain those goals.

A Deaf-Blind child is eligible for educational services until 22 years of age, whether or not he/she attains the goals stipulated in the IEP. A recent amendment to the Education of the Handicapped Act (P.L. 90-247) authorizes limited funds to assist Deaf-Blind persons in their early twenties to accomplish the transition from educational to community services. Planning for this transition should begin long before a Deaf-Blind person's twenty-second birthday. In many states a rehabilitation professional counselor becomes a member of the committee responsible for updating a Deaf-Blind person's IEP when prevocational training becomes part of the person's educational services. This ideally should occur by the child's fourteenth birthday, but no later than the individual's sixteenth birthday.

In effect, the IEP and the Individualized Written Rehabilitation Program (IWRP) should become a blueprint for education and rehabilitation service providers, so that they may facilitate the transition from education to other community services. Rehabilitation workers, school counselors, educators, community service providers and parents (when appropriate) should all assist the Deaf-Blind individual as members of the transitional team. The IEP and the IWRP should be integrated into the transition process so that the individual may begin to prepare for and gain appropriate skills for his post-education life while still in the school environment.

Together, education and rehabilitation professionals must develop programs which will substantially add to the vocational potential of the Deaf-Blind student. Individuals working with this population must be drawn into new partnerships which will provide the appropriate follow-along services for successful integration into the community and work setting. While many Deaf-Blind individuals will be able to find employment in either competitive settings or in sheltered workshop settings, some individuals are likely to need supervision and/or assistance for even the most basic living functions. For these individuals, alternative community living arrangements such as in-home service, foster care service, group living arrangements or out-of-home care and supervision must be explored prior to the Deaf-Blind individual's exit from the educational setting.

Provision should also be made for a Deaf-Blind person to make a mid-career shift. This shift could be as a result of increasing disabilities or as a result of the same frustrations which motivate mid-career shifts among the non-disabled population. As Case Manager, the rehabilitation professional can facilitate this transition. Among the services a rehabilitation professional might provide which can facilitate this transition are a needs assessment in the community in which the Deaf-Blind resides, counseling services, alternative community living arrangements, and placement services.

Three State Plans Affecting Inter-Agency Collaboration

The following are examples of three state inter-agency plans for providing integrated services to Deaf-Blind persons. These plans have been selected to represent three **very different** models, with no endorsement intended for one plan over another. The particular bureaucratic structure of any state will, in part, dictate the type of plan most likely to be effective in drawing together service providers.

A. Legislatively Based Bureau of Transitional Planning

One state recently established, by legislative mandate, a Bureau of Transitional Planning whose purpose it is to ensure the appropriate continuation of services to disabled young adults leaving the educational setting at age 22. This Bureau of Transitional Planning exists within the executive office of human services and has representation from key state agencies.

The creation of this Bureau responds to the need for coordinated planning as the disabled individual graduates from high school or exits the special education setting at age 22—whichever comes first. The Bureau serves as a "clearing-house" through which appropriate transitional services are determined for the student moving from the educational program into

the community, and as a "broker" through which decisions are made regarding which government agency(s) is to provide on-going services. The legislation mandates that educational programs serving the disabled persons notify the Bureau of Transitional Planning of each disabled individual's pending graduation, or termination of service at least two years prior to that action. Upon notification of the individual's upcoming exit from the educational program, it becomes the responsibility of the Bureau to meet with the disabled individual, to confirm continued eligibility for services, and to determine "which habilitative services may be necessary or appropriate to assist that individual in realizing his potential for self-sufficiency in major life ativities" (Massachusetts Senate Bill No. 2219, Section 120). Upon determination of continued eligibility for service, the Bureau refers the case file, including transcripts of all educational information, to the appointed agency(s) deemed most appropriate to develop a transitional plan with the disabled individual and his/her guardians. That transitional plan must minimally include the following:

1. habilitative services necessary or appropriate to assist the individual in realizing his/her potential for self-sufficiency in major life activities.
2. agencies responsible for the provision of services
3. location of least restricted environment at which such services will be provided
4. expected duration for the provision of services

The transitional plan must be submitted to the Bureau for approval at least six months prior to the disabled individual's exit from the educational program. Upon approval, copies of the transitional plan are sent to the disabled individual and his/her guardians, and to the agency coordinators who will assume responsibility for the continued delivery of services. Upon exit from the educational program, the disabled individual is provided the services outlined in the transitional plan.

B. Multi-Agency Collaborative Network

In an effort to effect greater communication between a variety of state agencies, federal projects, and private groups serving the Deaf-Blind persons in one state, a multi-agency council was established to identify and investigate service concerns and needs of Deaf-Blind individuals.

The Council's purpose is to establish an informal network of exchange between not only the large stage agencies serving Deaf-Blind clients, but also the smaller agencies or service projects funded locally or through federal grant monies. Since the established purpose of the Council is to effect greater collaboration among agencies, no single agency or department has assumed the role of "host." This structure has both created and eliminated some difficulty in effecting change in the larger state bureaucracy. First, because the Council is not intimately linked with the bureaucratic structure (i.e., policy, rules, procedures) of any single agency, it is able to act independently and easily interact with state agency officials, legislative policy makers, and service providers without operating within the policy constraints of a host agency. Second, since the Council is not imbedded within a single agency's structure, suggestions and recommendations from the Council for across-agency procedural change need no prior approval by the "host agency," thus eliminating close alliances between the Council and any single group.

This Council, established recently, has begun to address several areas of great concern to Deaf-Blind individuals. An early concern brought to the group by Deaf-Blind consumers dealt with the free distribution of teletype services which would enable Deaf-Blind consumers to use the telephone independently in their homes. A TDD free distribution program already exists within the state. The Council is now serving an important advocate role for Deaf-Blind consumers in negotiating with the Public Utilities Commission for integration of telephone devices for Deaf-Blind individuals; on guidelines for educational services to Deaf-Blind children

(coordinated by the State Department of Special Education) through state special schools, state institutions and all public school facilities; on the development of a family learning vacation for families with newly diagnosed Deaf-Blind children; and on guidelines for integration of IEP/IWRP goals; effecting smoother transitions between the education and rehabilitation systems.

C. The Kansas P.L.A.N.: A Model of Inter-Agency Agreements

Another model plan for life-long service to Deaf-Blind individuals was adopted in 1981 by a third state. The Kansas P.L.A.N.* grew out of a "general problem of accessing services from various agencies and organizations to meet the many and varied needs of (the Deaf-Blind) population" (p. 165). The P.L.A.N.—a system of cooperative agreements between various agencies serving the deaf-blind client—was developed out of monies obtained through the Mountain Plains Center for Deaf-Blind Children and Youth. The structure of the P.L.A.N. requires the active cooperation and collaboration of five state agencies—Departments of Social and Rehabilitation Services, Education, Health and Environment, Human Resources, and Aging.

The basic structure of the Kansas P.L.A.N. calls for a State Coordinator of Deaf-Blind services (SC) and a number of Regional Service Coordinators (RSC). The State Coordinator's salary is shared by the five cooperating state agencies, and responsibilities held by that individual include the following:

1. To assist clients in accessing the service delivery system and in making contacts with the RSC;
2. To coordinate with RSC's to provide services for clients, especially when those services are only available outside of their region or outside of the state;
3. To function as a "motivator" for establishing needed new services in the state;
4. To conduct inservice training for RSC's and local service providers when necessary;
5. To conduct regularly scheduled and specially called Board meetings for the purpose of modifying procedures and policies for coordinating services, and to provide progress reports;
6. To work individually with state agencies to improve service provision to Deaf-Blind individuals and their families.
7. To coordinate with Kansas P.L.A.N. Affiliates for the purpose of disseminating current information and improving services;
8. To annually contact Deaf-Blind individuals to insure that current needs are being met;
9. To establish a data collection system for determining services needed, services provided, etc., and
10. To function as a central clearinghouse for information and materials related to Deaf-Blind persons.

In contrast, the regional service coordinators (RSC) bear responsibility for obtaining and monitoring the services needed by Deaf-Blind individuals themselves. Additional responsibilities of the RSC include:

1. To maintain an up-to-date file on all Deaf-Blind individuals in their regions (including IEPs, IPPs, IWRPs, etc. as well as other diagnostic and evaluation reports);
2. To obtain diagnostic testing and evaluation through local resources where needed;
3. To identify service options for Deaf-Blind persons and outline a short- and long-range service plan;
4. To obtain needed services inside and outside of the region;
5. To maintain regular contact and report regularly to the State Coordinator of Deaf-Blind Services;

6. To increase personal knowledge and competence by attending training workshops devoted to Deaf-Blind services;
7. To assist the State Coordinator in setting up and conducting regional workshops for local service providers;
8. To follow up services to Deaf-Blind individuals to assure that services are both appropriate and adequate, and
9. To identify gaps in service, coordination problems, unsatisfactory services, system delivery problems, and notify the State Coordinator of such.

The RSC stays in close contact with direct service providers and health care providers. When a direct care provider identifies a Deaf-Blind individual or suspects a person may have serious hearing and vision impairments, the direct care provider contacts the Regional Service Coordinator (RSC) for that area of the state. The referral to the RSC may be made by any individual including the Deaf-Blind person or a member of his/her family. If the initial contact is made with the State Coordinator (SC), the SC then contacts the appropriate RSC.

Once the RSC has been contacted, the case management file will be updated. The RSC will contact the Deaf-Blind individual or a representative and complete an intake form. Upon completion of the intake form, the RSC determines or verifies the needs of the individual, prepares a brief service plan, and begins the process of coordinating the provision of the necessary services. This may entail requesting meetings, securing assessments, securing the appropriate funding, establishing timelines for completion of each activity and providing follow-up to determine if adequate service provision has occurred.

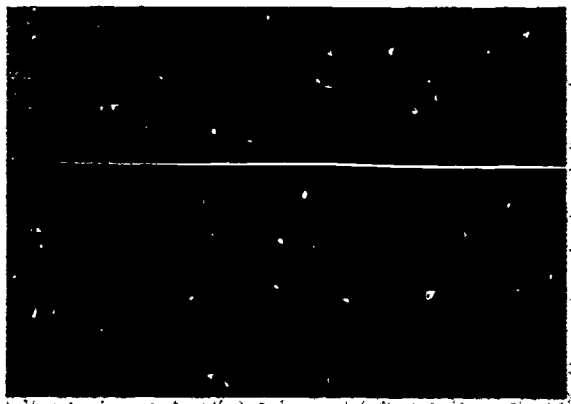
If problems arise in service provision or other matters related to coordination, the RSC will contact the involved parties to resolve the problem. This may require scheduling meetings, phone calls, making visits, etc., to both local and state agency service providers. The Regional Representative of the Helen Keller National Center may also be of assistance in these cases. At the point when a solution is determined, the SC returns the coordination responsibility to the RSC. The SC will follow-up to determine if progress towards meeting the need for the Deaf-Blind person has been made.

An annual review of each client's file will be conducted. Through the annual review, unmet needs of the Deaf-Blind population and direction for the system will be decided.*

*Descriptions of the Kansas P.L.A.N. were drawn from **Kansas Plan for Deaf-Blind**, Kansas State Department of Education, Topeka, 1981.

With
our vast
store of wisdom
and experience
it seems
a shame
not to use
them all.

unknown



Special Needs of Deaf-Blind Persons

Objectives:

1. To identify and describe the four general categories of Deaf-Blind people.
2. To present a graphic system describing 16 area of special needs within the four general categories of Deaf-Blind people.
3. To provide the counselor with guidelines with which to relate client characteristics to assessment and/or training in orde: to facilitate the delivery of rehabilitation services.

Summary:

The sense of sight and hearing are the two primary channels by which the individual experiences the world. When both these senses are limited or lost, the individual's world may be restricted to as far as the fingertips may reach. The loss of sight and sound, and the age of onset of the dual disability confront the individual with major problems in day-to-day living.

The disability of Deaf-Blindness is more than the combined symptoms of the individual blind person, and the individual deaf person. The dual disability is one of the most severe of handicaps in the fields of education and rehabilitation. Loss of sight and hearing affects the individual's knowledge of the immediate environment; and limits emotional, intellectual, and physical interaction in the world.

Attempts have been made to determine the special needs of many Deaf-Blind persons without going into specific details that would apply to a specific individual. It is recognized that every Deaf-Blind person is first an individual, and second a person with a dual sensory disability. Individual clients have their own special needs, their own adaptations to special needs, their own frustrations, their own successes and disappointments. This section has been developed for use by rehabilitation counselors, teachers, and other professionals in their work with Deaf-Blind persons; as a reference rather than "how to" work with a specific Deaf-Blind individual.

Discussion:

The deprivation of sight and hearing affects and increases a Deaf-Blind person's dependence on others. Dependency is not necessarily pathological. The Deaf-Blind person's dependency on other individuals and various community support systems, while still maintaining and improving areas of independent skill, thought feelings, and action, reflects a healthy and appropriate adjustment.

Deaf-Blindness has been divided into four categories. Each category is based upon the onset of the combined disability. These categories should be utilized only as a system in the search for a more individualized understanding of the Deaf-Blind person.

The four categories are:

A. **Congenitally Deaf, Adventitiously Blind**
The person who has been deaf from birth or early childhood and loses sig in adult life, i.e., Usher's Syndrome

B. **Congentially Deaf-Blind**
The person who has been both deaf and blind from birth or early childhood, i.e., Maternal Rubella.

C. **Adventitiously Deaf-Blind**
The person who loses both sight and hearing in adult life, i.e., trauma, war injuries, age.

D. Congenitially Blind, Adventitiously Deaf

The person who has been blind from birth or early childhood and loses hearing in adult life, i.e., retrolental fibroplasia, aging, injury.

(Taff-Watson, 1984)

The four categories may be used as a system to enable the counselor to readily anticipate and identify the level of interaction that might occur in working with many Deaf-Blind persons. This is indicated in the column under "Possible Characteristics." The second column, "Assessment and/or Training In:," provides the counselor with some problem solving techniques, activities, and/or programs that the Deaf-Blind person may need as part of the rehabilitative process.

CONGENITALLY DEAF-ADVENTITIOUSLY BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
advocacy	
May have been involved in various degrees in advocacy programs for the deaf, with deaf social clubs, etc.	May experience some difficulties or rejection within deaf community. Should be encouraged to remain in existing clubs, etc. and be informed of deaf-blind advocacy groups as well. If no such advocacy group exists, individuals should be encouraged to seek out peers and perhaps start a group on their own.
education	
Education may have taken place in residential schools for the deaf or in special classes within the regular public school system. May have been trained in the "Oral" or "Total" communication system.	English language skills to improve written and signing communication skills; may need remedial English skills. May need other alternate methods of communication if background is "Oral."
May have received educational and/or vocational training in a profession or vocation that requires visual abilities.	Vocational and/or educational training to determine if appropriate to dual disability.
If main means of communication is A.S.L., English may be a second language.	English language skills in order to improve communication with hearing world and to facilitate a transition to braille if applicable.
communication	
If main means of communication is American Sign Language, English may be a second language.	a. English language skills in order to improve communication with hearing world and to facilitate a transition to braille if applicable. b. Speech therapy for survival words/phrases.
Received signs visually.	Alternate methods in receiving signs, i.e., tracking, etc.

CONGENITALLY DEAF-ADVENTITIOUSLY BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
communication (cont'd)	
If background is oral, may use speech as primary means of:	
a. Expressive communication.	a. Speech therapy to determine if services would be necessary and investigate strategies for optimizing lipreading.
b. May have relied on lipreading for communicative input.	b. Alternate methods of communication, i.e., print-on-palm, writing, fingerspelling, sign language.
May have used written communication and/or gestures as main means of communicating with the public.	a. Writing guides to maintain clarity of print. b. Typing as an alternative to print. c. Pre-written cards to communicate messages to public.
May have depended on the printed word for written input.	a. Low Vision aids (magnifiers, glasses, etc.) b. Reading aids and devices (CCTV, Viewscan, Optacon, etc.) c. Braille d. Methods of labeling items (raised print, braille, etc.)
May only have used a system of home signs and gestures.	a. Supplemental methods of communication (picture books, card systems, etc.) b. Remedial English skills c. American Sign Language
environmental adaptations	
Wake-up device - familiar with flashing light devices.	Vibrotactile system (i.e., clock with vibrator attachment) for wake-up.

CONGENITALLY DEAF-ADVENTITIOUSLY BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
environmental adaptations (cont'd)	
Signaling Systems - familiar with flashing light devices for doorbell, telephone, fire alarm.	Vibrotactile device (i.e., Tactile Communicator) which performs the same functions.
Telephone - used Telecommunications device (TTY/TDD) for communication on the telephone with other TTY/TDD users.	Use of braille attachment for TTY/TDD. Use of Microbraille 2400, Telebraille, and other similar systems.
Time Instruments - used regular wrist watch for time telling purposes.	Use of Low Vision or braille watches.
Visual Environmental Modifications - little or no experience with adapting environment for visual comfort and safety.	Adapting the home/work environment to enhance contrast, reduce glare, and alter illumination level.
Calculators/Word Processors - may have experience with visually oriented systems.	Alternative input/output devices.
independent living skills	
May have lived in a family situation and carried out some responsibilities for home management tasks.	Adaptive techniques of home management.
May have been independent in personal management skills, i.e., grooming, table skills, sewing repairs, identifying money, etc.	Adaptive techniques of personal management.

CONGENITALLY DEAF-ADVENTITIOUSLY BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
independent living skills (cont'd)	
May have lived in independent situation and was responsible for above named tasks, as well as budgeting, banking, shopping.	Home management as well as adaptive techniques for budgeting and banking. Techniques for shopping would be included in an Orientation and Mobility program.
family support systems	
May have lived in close family situation and/or established close family-like ties to other deaf individuals, possibly as a result of involvement in residential school for the deaf.	May need assistance counseling and support in maintaining and/or improving interpersonal relationships within family.
housing	
Please see sections on environmental adaptation and independent living skills.	Please see sections on environmental adaptation and independent living skills. In addition, housing accommodations, availability and location to transportation, employment and socialization should be explored.
medical	
Other than Ophthalmological and Otolaryngological care, may have had minimal or average experiences in a medical setting. May have also determined what medical facilities have been responsive to his communicative methods.	a. An awareness of various community—medical—emergency resources, including the possible existence of emergency network system. b. Use of supplemental methods of communication to emergency medical personnel when interpreters are not available.

CONGENITALLY DEAF-ADVENTITIOUSLY BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
interpreter services	
Has not successfully utilized professional interpreting services.	The mechanics of using professional interpreter services including how to's, rights, responsibilities, etc.
Displayed success in utilizing professional interpreting services.	Identifying interpreters knowledgeable in interpreting for the deaf-blind in their community; or how to provide information to interpreters on the deaf-blind person's special needs, i.e., tactual signing, special lighting, sighted guide techniques, etc.
orientation and mobility	
May have been a community traveler and user of public transportation, an experienced "visual traveler."	Adapted mobility techniques, including sighted guide, possible use of the long cane, community travel and mass transportation.
If she/he has been a driver—often continues to drive, despite the onset and progressive loss of vision.	Supportive counseling to accompany mobility training. Often, the problem of acceptance of visual loss will manifest itself at this time.
May have little or no experience with low vision aids.	Near and distance vision aids (anti-glare products, telescopes). In addition, training techniques to optimize the person's remaining functional vision.
Aids and Devices - little or no experience with electronic travel aids such as Mowat Sensor.	In adapted travel aids which have vibrotactile output.
Guide Dog - little or no experience with a guide dog.	In the use of a guide dog.

CONGENITALLY DEAF-ADVENTITIOUSLY BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
recreation/socialization/leisure time activities	
Main source of socialization with the deaf community. When visual problems occur is usually rejected by community: a. Because of limited vision, deaf-blind person now misses communication attempts by deaf friends. This is often misinterpreted as "snobbish," behavior. b. Deaf friends fear becoming blind themselves; therefore, avoid contact with deaf-blind peers. c. Because of increased dependence (i.e., transport and sighted guide) friends may fear that the deaf-blind person will come to depend on them.	Continuing socialization within the deaf community. a. Deaf-blind must educate the deaf community—adapting communication, show them their abilities rather than focusing on disabilities; provide facts to counter the myths. b. If feasible, seek out other deaf-blind people in order to form a new community for socialization, recreation and mutual support.
Uses captioned TV and movies.	May be able to continue to use captioning with Low Vision aids. If not, may require interpreting services.
Participates in visually oriented table games, arts and crafts projects, etc.	Games that have been adapted for the blind, and adaptive arts and crafts techniques.
Participates in sports-related activities—jogging, swimming, bowling.	Adaptive equipment to maintain skills. - Investigate use of volunteer or guide/companion to accompany deaf-blind person.
safety/emergency	
May have been an expert community traveler—driving a vehicle and may continue to drive, despite progressive loss of vision.	Emotional impact of giving up driving license and may require counseling (See orientation and mobility).

CONGENITALLY DEAF-ADVENTITIOUSLY BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
safety/emergency (cont'd)	
Experiencing greater degree of difficulty in traveling.	The need for counseling to give an increased understanding and acceptance of the nature of the loss of vision. (See Orientation and Mobility).
vocational	
May have received vocational training or is currently employed in a position where adequate vision is necessary to complete the job function.	Vocational training to determine appropriateness of current job because of dual handicap and/or determination as to the possibility of modification or job and/or work environment.
volunteer	
May or may not have had contact with volunteers. May have been previously reluctant to appear to be dependent upon volunteers or others.	Willingness to utilize volunteers in agency and/or home community should be explored, especially the dependency issue. Recruitment and training of selected volunteers is essential. (HKNC has an extensive volunteer program and assistance is available from the volunteer coordinator).

CONGENITALLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
service need—advocacy	
May have very narrow perceptions and understanding of interventions, legislation, rights, opportunities, and the ability to express the need for such.	Because of extremely limited communication and educational experiences, would require an advocate to evaluate day-to-day living conditions, educational, medical, behavioral rehabilitative activities, written reports and goals, in order to enter into a rehabilitation system and receive optimum care.
communication	
No formal communication system.	Pre-language and language concept.
Communicates in gestures.	Ability to change from gestures to formal language system.
Communication is limited to survival words.	Language development to express basic needs, wants, and feelings.
Uses pictures, simple sentences, gestures and/or mime.	Increasing language capacity in functional situations.
Uses formal communication system (speech, sign, fingerspelling, etc.)	a. Increasing English and/or ASL language level. b. Ability to communicate with the public. c. Speech therapy to determine if training would be beneficial.
education—formal/informal	
The extent and degree of educational achievement and retention may be quite limited.	Ability to communicate and/or express self, demonstrate level of personal care, demonstrate what achievements have been retained from the educational system. a. Vocational potential.

CONGENITALLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
interpreter services	
Because of limited language level, professional interpreter services are not appropriate.	A guide/companion who is familiar with the individual's background and skills and with whom the deaf-blind person is comfortable, accompany him/her to appointments, etc. This guide would provide information to a doctor, etc. about the client; and would be able to communicate simple commands to client as well as interpret behavioral responses of client to the doctor.
Communicates using pictures, simple sentences, gestures, mime and some signs. Has no experience with an interpreter.	This person would require the services of a guide/companion who is familiar with the individual's background as well as his unique system of communication. The guide/companion should try to elicit as much information as possible from the deaf-blind person using every communication means available. In cases where the individual cannot respond for him/herself, the guide/companion could provide supplemental information.
medical need (general, emergency, psychiatric)	
May frequently require broad range of medical care. May not be able to communicate the existence of medical problem, other than acting out or displaying unusual behavior. Medical history may not be complete or even available.	Local medical facilities, especially emergency services should be contacted to determine their capability (willingness) to provide medical services. This should include some orientation to this particular client, procedures for care and payment of services, Consent Agreements necessary for the facility to provide care, and the availability of other support services within the medical facility and/or from the referring agency. A summarized, brief, complete medical history available for the medical facility.
May not be receptive to medical or dental care.	Attempts to prepare the deaf-blind client for the medical program should be made i.e., role playing, familiarization of medical personnel and materials.
May have experience with audiologic/ENT and ophthalmological/low vision services.	Annual medical examinations including annual audiological evaluation to monitor the status of hearing. If audiologic evaluation is not indicated, impedance audiometry would be advisable. It is also recommended that the client be seen for an annual Ear, Nose and Throat (ENT) examination to ensure that the client remains free from any transient middle ear problems. Annual ophthalmologic examination is also recommended to diagnose any pathological deterioration, and annual low vision examination to maximize usefulness of residual vision.

CONGENITALLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
medical need (general, emergency, psychiatric) (cont'd)	
Cause of loss may be genetic.	Genetic counseling for individual and/or family members.
networking	
The ability to share information is severely curtailed because of limited or even nonexistent formal communication skills.	Will probably require surrogate assistance in becoming part of any network system, especially if the system includes emergency help or information.
orientation and mobility	
Little or no exposure to environment; is led from one place to another, not allowed/able to travel within home and work environments independently and safely.	Orientation to home/work environments, protective techniques; sighted guide.
Safely negotiates home/work environments; uses protective techniques, uses sighted guide for travel.	Basic travel techniques including possible use of cane, for simple routes within home and work environment.
May use basic travel techniques, including possible use of the cane for simple routes within home and work environment.	Community travel and use of public transportation.
recreation/leisure time/socialization	
Little or no experience in occupying leisure time productively and independently.	Arts and Crafts type activities which can be carried out independently.

CONGENITALLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
environmental adaptations/aids and devices	
Wake-up Devices - may need prompt to wake up or have "internal clock" and wake up at the same time every day. Little or no concept of time telling.	The use of a flashing light or vibrotactile device (i.e., James-Remind-O-Timer* with vibrator attachment), which can be pre-set to required wake up times.
Alarm System - may not respond to doorbell; may not use telephone, may require physical prompt to evacuate in fire drill.	Use of vibrotactile alarm system for doorbell, fire drill (i.e., Tactile Communicator).*
Time Telling Devices - Little or no experience with time telling or watches.	Time telling abilities and appropriate low vision or braille watch
family support systems	
Family support systems may or may not exist.	Determine the existence of a family support system.
Existing family support systems may range from intensive, protective care to no demonstrated concern.	Provide an appropriate support and informational system to the family.
Existing family support systems may feel frustrated, angry, tired, without a sense of direction and skeptical of professional service delivery organizations.	Be appropriately open in working with the family as to what may or may not be available for the deaf-blind individual.
Existing family support systems will be specifically concerned regarding the realistic plans for post-educational placement in regard to living accommodations, work activities, and/or employment.	Enable the family to seek similar self-help groups and become an advocate for realistic service delivery systems.

*See section on Resources.

CONGENITALLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
family support systems (cont'd)	
Existing family support systems may themselves be fragile, may be characterized by internal conflict, and/or operating on a day-to-day level.	Family system may be in need of professional support and counseling.
housing	
Has experienced residential living in an educational, hospital, or other form of institutionalized setting. May have lived in family setting, generally in a protective manner.	Self-care skills generally with trained personnel in skills of daily living and behavior modification. Determine availability of housing resources that will be able to accommodate the individual and what work activity and recreational opportunities are accessible.
independent living skills	
Requires assistance to perform self-care, i.e., toileting, dressing, feeding.	Self-care skills in a functional setting.
Little or no experience with money and time skills.	Money and time skills in a functional setting.
Little or no experience in food preparation, cleaning and laundering skills.	Home management skills in a functional setting.
Little or no experience with community resources, such as grocery store, bar or shop, deli.	The use of local resources to satisfy personal needs, such as replenishing grooming items, getting a haircut, purchasing clothes, etc.
Interpersonal skills extremely limited.	Increasing interpersonal skills especially for a group home setting.

ADVENTITIOUSLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
education	
Educated as a hearing/sighted person. If visual and auditory deterioration began in early years, may have had difficulty maintaining academic performance. May have left school before high school graduation.	a. In the potential/desire to pursue higher education, i.e., adult education, college, etc. would need to establish strong avenue for communicative input in order to participate in classes using an interpreter. If braille proficiency is achieved, can enroll in correspondence courses using braille materials (i.e., Hadley School for the Blind). b. Possibility of pursuing G.E.D. (Graduate Equivalency Diploma)
communication	
Depended on hearing for communicative input.	a. By Audiologist to determine if person would benefit from amplification. b. In the use of alternate methods of input (i.e. alphabet cards, print-on-palm)
Used speech to communicate with others.	By Speech Pathologist to determine if speech therapy services would be beneficial.
No experience with sign language or fingerspelling.	In tactual fingerspelling for communication with peers and family; possible assessment and training in basic signs that can be combined with fingerspelling to increase speed of communication.
Depended on print for reading and writing.	a. Reading aids and devices (i.e., CCTV, Viewscan, Optacon) b. Low vision aids (i.e., glasses, magnifiers) c. Braille d. Methods of labeling items (i.e., raised print, large print, braille) e. The use of writing guides to maintain clarity in print. f. Typing as an alternative to print.

ADVENTITIOUSLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
environmental adaptations	
Wake-up devices - may have used conventional audio alarm clocks.	A flashing light or vibrotactile system (i.e., James Remind-O-Timer clock with vibrator attachment).
Signaling systems - depended on auditory input for doorbell, telephone, fire alarm, etc.	Vibrotactile device (i.e., Tactile Communicator) which performs the same function.
Telephone - used regular telephone.	a. Telephone amplifier. b. Tactile Speech Indator. c. Braille attachment to conventional phone (Caution - this would only allow the individual to communicate with others who have similar attachments or who utilize a TTY/TDD). d. Morse Code to receive and/or send messages.
Time telling - used visual watches.	Low Vision or braille watches.
Low Vision - little or no experience with adapting the environment for visual comfort and safety.	Adapting the home/work environment to enhance contrast, reduce glare, etc.
Calculators/Word Processors - may have used audio/visual based systems.	a. Braille calculators. b. Abacus. c. Word processors with braille output, i.e., versobraille, micobraller, tele-braille.

CONGENITALLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
recreation/socialization/leisuretime activities (cont'd)	
Little or no experience in participating in recreational activities such as exercising, swimming, tandem bicycle riding, etc.	Recreational activities with a guide/companion.
May be unaware of peers in environment; does not interact in a social manner.	Basic social skills.
safety needs	
Because of the possibility of various motor impairments, behavioral problems, independent travel in the community may be limited.	Basic travel techniques, orientation to environment, protective techniques, and use of sighted guide/companion.
May have limited awareness and limited problem solving abilities and may be misidentified by community caretakers as individuals requiring protective custody.	a. Orientation for the community caretakers of the problems, needs, and abilities of the individual. b. Personal safety through role playing, gestures, etc. c. Possible use of buttons or cards identifying the individual as deaf-blind.
spiritual needs	
Because of extremely limited communication, educational and possible familial interaction, this individual may not have a self-determined religious or spiritual direction.	Opportunities for involvement by carefully selected volunteers when the individual and/or family so agrees.

CONGENITALLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
volunteer activities	
May be easily led and/or involved in simple activities (recreational, arts and crafts, exercise).	Volunteer who will involve individual in appropriate recreational, sport, arts and crafts, and activities depending upon the individual's response.
vocational	
Because of extremely limited communication, education, education experiences, and other forms of environmental interaction, this individual may have bounded areas of work potential.	Work potential, a good possibility does exist that this individual may successfully adjust to a work activity or sheltered workshop program.

ADVENTITIOUSLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
advocacy	
May not have been involved in self-advocacy before onset of disability.	May need counselor to educate client as to his/her rights, possible resources, and avenues to pursue in order to enable the individual to receive optimum services. If individual is unable to advocate for self, may need to assign advocate.

ADVENTITIOUSLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
family support systems	
May have been main provider for family prior to onset of disability.	a. Investigate other sources of income. b. Individual and family support and counseling to assist in adjustment to disabilities and the impact on each relationship. c. Vocational evaluation and/or training to allow client to regain role of provider or contributor to household when possible.
May have been homemaker in family.	Family may be afraid to allow individual to retain this role because of safety considerations, etc. If appropriate training has been received, however, family must be encouraged to be supportive in allowing client to resume household responsibilities.
May have lived independently prior to onset of disabilities; after onset may be more into dependent situation.	Personal and family adjustment services.
housing	
Usually, no special considerations had to be taken in terms of location of housing.	a. Investigate housing that is near community resources or easily accessible. b. Investigate group living or semi-supervised living situation.
No special equipment/adaptations were necessary for daily living.	a. Investigate fire alarm signaling system such as the Tactile Communicator. b. Adaptations for doorbell, telephone signal. c. Ways of receiving emergency information/weather bulletins, etc.

ADVENTITIOUSLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
independent living skills	
May have lived in a family situation and carried out some responsibilities for home management tasks.	Adapted techniques of home management.
May have lost some personal management skills, i.e., grooming, table skills, sewing repairs, identifying money, etc.	Adapted techniques of personal management.
May have lived in an independent situation and was responsible for above named tasks, as well as budgeting, banking and shopping.	Adapted techniques of budgeting, banking and shopping.
interpreter services	
Typically unfamiliar with interpreting services and procedures.	a. In the mechanics of using professional interpreter services, including "how to's", rights and responsibilities, etc. b. In identifying interpreters in their community who are knowledgeable in interpreting for the deaf-blind; or assessment and/or training in how to provide information to interpreters on the special needs of the deaf-blind, such as tactual fingerspelling, sighted guide techniques, etc.
medical	
May require a broad range of medical care.	a. Periodic monitoring of medical status. b. Local medical facilities, especially emergency services, should be contacted to orient medical staff to client's needs. This may include training in basic communication skills, such as print-on-palm, or the use of an interpreter.

ADVENTITIOUSLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
medical (cont'd)	
May have no experience with audiologic/ENT and Ophthalmologic/low vision services.	Annual complete audiologic evaluations (to include impedance audiometry) to monitor the status of the individual's hearing. If hearing aids are used, annual hearing aid evaluations are recommended to insure that the aid(s) continue to function properly and be appropriate for the hearing loss. Annual ear/nose/throat (ENT) exams are recommended to insure that the individual remains free from any transient middle ear problems. Annual Opthalmologic examinations are also recommended to diagnose any pathological deterioration and annual low vision examinations to maximize usefulness of residual vision.
May develop unrealistic expectations re: cures for deafness and/or blindness.	Individual must be provided with facts re: prognosis, etc. and realistic expectation for remediation or cure.
Cause of loss may be genetic, i.e., Ushers Syndrome Type II.	Genetic counseling for individual and family members.
networking	
Probably relied on the media (TV, radio, newspaper) for information, including notification of local emergency situations, weather, local events, etc.	a. May still be able to read regular print. If trained in braille or large print, could utilize transcribed newspapers, magazines, etc. b. If unable to access print/braille, the use of a "reader/interpreter" to convey information. c. Orientation to telecommunication devices and the various services/information available through them. d. Captioning device for television.
May have been a member of club or other social group, though not related to deaf/blindness.	a. Orientation/membership in organizations related to deafness/blindness and/or deaf/blindness, i.e., NADB. b. If no local resources are available, may want to start a group in the home community.

ADVENTITIOUSLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING

orientation and mobility

Has been a sighted/hearing community traveler and user of public transportation.	Adapted mobility techniques, including the possible use of the long cane, community travel and mass transportation.
If she/he had a driver's license prior to blindness may continue to drive, despite the onset and progressive loss of vision.	Supportive counseling to accompany mobility training. Often the problem of acceptance of the visual loss will manifest itself at this time.
Little or no experience with low vision aids.	The use of near and distance vision aids (i.e., anti-glare products, telescopes), and techniques to optimize the person's remaining functional vision.
Aids and devices - no experience with various electronic travel aids, such as the laser cane and Mowat sensor.	The use of adapted travel aids that have vibrotactile output.
Guide dog; no experience with the use of a guide dog for travel.	The possible use of a guide dog.

recreation/socialization/leisuretime activities

Socialized among hearing-sighted peers.	(Because of increasing communication difficulties, deaf-blind person encounters problems in maintaining social contacts. She/he would have to): a. Educate peers in alternate methods of communication. b. Locate or establish social group of deaf-blind peers.
Participates in visually and/or auditorily oriented games, arts and crafts projects, etc.	a. Games that have been adapted for the blind. b. Adaptive arts and crafts techniques. c. Adaptive techniques of interacting while game playing, such as tapping players to indicate it is their turn, etc.

ADVENTITIOUSLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
recreation/leisuretime/socialization (cont'd)	
Audio and visual related activities (i.e., music radio, TV, reading) often comprise a significant amount of leisure time.	a. Amplification b. An interpreter c. Vibrotactile avenues of input d. Adapted word processor (audio or braille output) to provide access to information.
Participates in sports-related activities—jogging, swimming, bowling.	a. Adaptive equipment to maintain skills. b. Investigate the use of volunteer or guide/companion to accompany deaf-blind person. c. Explore possible recreational outlets available in the community.
safety/emergency	
Probably traveled independently; was able to seek assistance from community.	a. Orientation for community caretakers of the needs and abilities of the individual. b. Orientation and mobility training for client to include ways of soliciting aids. c. Possible use of buttons, cards, etc. to identify the person as "deaf/blind."
May be wary of situations that present a threat to personal safety and safety of personal property.	a. Possible training in personal protection strategies i.e., holding purse close to body, leaving lights on in house, using whistles to summon help, etc. b. Signaling systems to alert to fire alarm, doorbell, telephone, such as the Tactile Communicator. c. Possible use of captioned TV for news, bulletins, etc. d. Possible integration into - telecommunication systems.

ADVENTITIOUSLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
spiritual	
Religious background may vary. May have pursued "quick cures" through various religious outlets. **May use religion as a "will to live" purpose from involvement in religious activities.** **May reject religion and/or possibly project that deaf-blindness is a form of punishment for some wrong doing.**	Orientation to religious community and support services that may be available, i.e., volunteers, social clubs, transportation, etc. Supportive counseling to clergy to work through feelings of guilt, isolation, etc.
vocational	
May have a limited or no work history depending on age of onset and career goals.	a. Vocational evaluation to determine interests and abilities. b. Vocational Counseling to assist in establishing realistic goals. c. Prevocational and/or vocational training.
May have work history, possibly an intensive one.	a. Investigate possible adaptations to job task and environment to accommodate vision/hearing loss. b. Evaluation/instruction in additional skills/aids and devices. c. Vocational evaluation may be necessary to identify new career options. d. Vocational counseling to establish realistic goals. e. Pre-vocational and/or vocational training.

ADVENTITIOUSLY DEAF-BLIND

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
volunteers	
Probably was not a consumer of volunteer services.	a. Orientation to various services provided through volunteers, i.e., brailling materials, acting as guide for shopping, driving to church, etc. b. Access to resources for locating and contacting volunteers in the community.

CONGENITALLY BLIND-ADVENTITIOUSLY DEAF

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
advocacy	
May have had direct or peripheral involvement with advocacy organizations for and of the blind.	Should be encouraged to continue involvement and/or expand involvement to Deaf-Blind advocacy groups.
May not have been involved in advocacy organizations or in self-advocacy.	May need counselor to educate client as to his/her rights, possible resources, and avenues to pursue in order to enable the client to receive optimum services.
education	
May have received education either in residential or non-residential schools for the blind or within the general public school systems.	Educational and/or vocational direction may be necessary because of the dual disability.

CONGENITALLY BLIND-ADVENTITIOUSLY DEAF

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
education (cont'd)	
Has depended upon hearing, visual aids, talking books and/or braille for educational activities.	Please refer to Communications Assessment and/or Training.
communication	
Has depended on hearing for communicative input.	a. By audiologist to determine if amplification is necessary.
Has used speech to communicate with others.	b. The use of alphabet cards (braille and/or print), print-on-palm, and Teletouch as alternate methods of input.
	c. By Speech Pathologist to determine if speech therapy services would be beneficial.
Has used braille for reading and writing.	Use of Optacon for access to print material.
No experience with sign language or fingerspelling.	Tactual fingerspelling for communication with peers and family, possible Evaluation/Instruction in basic signs that can be combined with fingerspelling to increase speed of communication.
environmental adaptations	
Wake-up Device - probably uses conventional alarm clock or talking clock.	Vibrotactile system (i.e., James Remind-O-Timer clock with vibrator attachment).
Signaling Systems - depends on auditory input from doorbell, telephone, fire alarm, etc.	Vibrotactile device (i.e., Tactile Communicator) which performs the same functions.

CONGENITALLY BLIND-ADVENTITIOUSLY DEAF

environmental adaptations (cont'd)

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
Telephone - uses regular telephone.	a. Telephone amplifier b. The Tactile Speech Indicator (TSI) c. [illegible] conventional phone. (Caution - this would only allow the [illegible] with others who have similar attachments or who [illegible] d. Morse Code to receive and/or send messages.
Low Vision - may have experience with adapting the environment for visual comfort and safety (i.e., how to utilize contrast, reduce glare.)	Adapting the home/work environment to enhance contrast, reduce glare, etc.
Calculator/Word Processors - may have used audible calculators and word processors.	a. Braille calculators b. Abacus c. Braille word processors—i.e., Versabraille, Microbrailler, Telebraille

independent living skills

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
May have lived in a family situation and carried out some responsibilities for home management tasks.	Adaptive techniques of home management.
May be independent in personal management skills, i.e., table skills, grooming, sewing repairs.	Adaptive tactual techniques of personal management.

CONGENITALLY BLIND-ADVENTITIOUSLY DEAF

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
independent living skills (cont'd)	
Lived in an independent situation (identifying money, etc.) and was responsible for above named tasks, as well as budgeting, banking, shopping.	Budgeting techniques should remain the same. Alternate methods of communicating with the public would be necessary for banking. Adaptive techniques for shopping would be included in an orientation and mobility program.
interpreter services	
Is typically unfamiliar with interpreting services and procedures.	a. The mechanics of using professional interpreter services, including "how to's", rights and responsibilities, etc. b. Identifying interpreters in the community who are knowledgeable in interpreting for the deaf-blind; or Assessment and/or Training in how to provide information to interpreters in the special needs of the deaf-blind, i.e., tactual fingerspelling or use of a Tellatouch, sighted guide techniques, etc.
family support systems	
May have been an involved member of a family, perhaps a homemaker or main provider prior to onset of dual disability.	Please refer to Adventitiously Deaf-Blind, Family Support Systems.
Prior to disability, may have lived independently.	
medical	
May have had minimal experience with audiological and ENT services and care.	Annual and complete audiologic evaluations (to include impedance audiometry) to monitor the status of the client's hearing. If hearing aids are used, annual hearing aid evaluations are recommended, as well as annual ENT examination.

CONGENITALLY BLIND-ADVENTITIOUSLY DEAF

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
medical (cont'd)	
May have unrealistic expectations or anxieties and fear regarding medical condition.	Client must be provided with facts re: medical condition and prognosis with realistic expectations. Should also be provided with location of medical facilities and use of interpreter services. The need for intensive counseling should also be explored.
safety/emergency	
Probably maintained self in community in a relatively independent manner. Depended on hearing and speech to communicate with others in relation to safety and emergency needs and situations.	Please refer to Adventitiously Deaf/Blind, Safety and Emergency—Support Systems 1. through 2.
orientation & mobility	
Has had basic Orientation and Mobility training. May use a long cane. Stays within home environment; uses sighted guide for travel outside of the home. May have poor spatial orientation.	Tactual cueing techniques of sighted guide and protective techniques.
Has been an experienced community traveler, including the use of public transportation.	Community travel and the use of mass transportation with a focus on adaptive techniques for the blind-deaf, i.e., soliciting public assistance, the use of the Tellatouch to communicate with the public, etc.
May be experienced in the use of low vision aids.	Re-evaluate to determine if aids are appropriate or if additional aids are necessary.
Aids and Devices - may have experience with various electronic audible travel aids (laser cane, Mowat sensor, etc.).	Re-evaluate skills with adapted travel aids that have **vibrotactile** output.

CONGENITALLY BLIND-ADVENTITIOUSLY DEAF

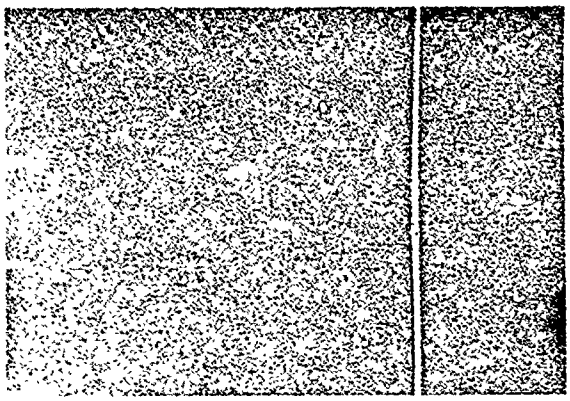
POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
orientation and mobility (cont'd)	
Guide Dog - may have used dog for travel.	Re-evaluation of skills by agency that issued guide dog.
recreation/socialization/leisure time activities	
Socialized within the "hearing" world.	Because of increasing difficulty in receiving auditory input, deaf-blind person encounters problems in maintaining social contacts. She/he would have to: a. Educate peers in alternate methods of communication. b. Locate or establish social group of deaf-blind peers.
Familiar with games that have been adapted for the blind.	Adapted techniques for interacting while playing for the deaf-blind, such as tapping a player to indicate it is his turn, etc.
May have utilized services such as Talking Books.	a. Amplification. b. The use of braille word processors (i.e., Microbraille, Versabraille) to provide access to information of this type. c. Readers who are familiar with alternate methods of communication for the deaf-blind.
Audio-related activities (i.e., music, TV, radio) often comprise a significant amount of leisure time.	a. Amplification. b. An interpreter. c. Vibrotactile avenues of input.

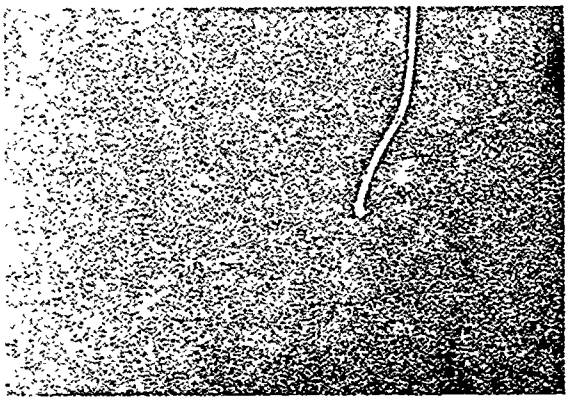
CONGENITALLY BLIND-ADVENTITIOUSLY DEAF

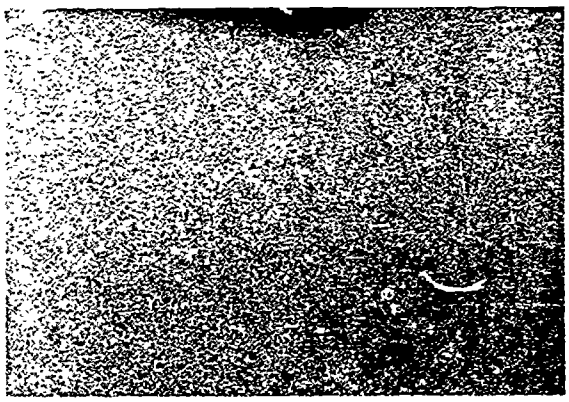
POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
recreation/socialization/leisuretime activities (cont'd)	
Participates in sports related activites—jogging, swimming, bowling.	a. Adaptive equipment to maintain skills. b. Investigate use of volunteer or guide/companion to accompany deaf-blind person. c. Explore possible recreational outlets in the community.
spiritual	
Religion background may vary from total absence to intense active involvement. May have experienced inconveniences and/or rejection in past contacts with religious system.	Orientation and/or availability of religious community and support services that may be available, i.e., volunteers, interpreters, transportation, counseling, social clubs, etc.
housing	
Accessibility to transportation, employment, school, shopping, etc., were generally primary conditions in location of housing.	Please refer to Adventitiously Deaf/Blind, Housing—Support Systems.
Within living quarters, probably utilized wake-up devices, various forms of signaling units and the regular telephone.	Please refer to Adventitiously Deaf/Blind, Housing—Support Systems.

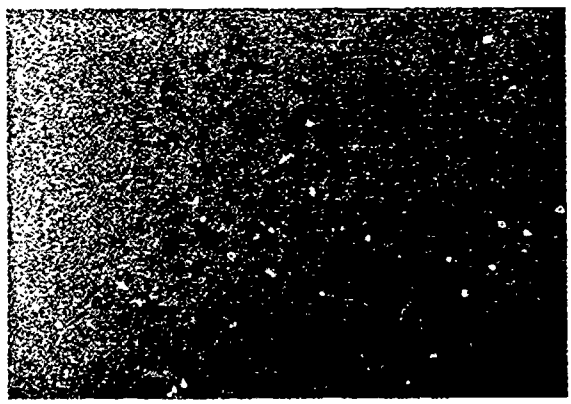
CONGENITALLY BLIND-ADVENTITIOUSLY DEAF

POSSIBLE CHARACTERISTICS	ASSESSMENT AND TRAINING
vocational	
Work history may have varied from no employment to sheltered workshops, vending, clerical, sales, professional.	Please refer to Adventitiously Deaf/Blind, Vocational—Support Systems, 1 thru 2.
Work skills may have depended upon expressive and/or receptive communication.	









A goal
of Counseling—
and one that
appears to
be consistant
with the goals
of our society
and with a
democratic philosophy,
is the development
of responsible
independence.

PaHerson, C.H.
and Stewart,
1971

Counselor Concerns

Objectives

1. To outline counselor concerns that must be acknowledged and addressed in providing appropriate services to Deaf-Blind clients.
2. To provide guidelines to counselors for dealing with the identified issues relevant to serving Deaf-Blind individuals.
3. To provide information and techniques that general caseload carrying counselors might use to serve Deaf-Blind clients.

Summary

Serving Deaf-Blind clients presents a unique challenge to rehabilitation counselors. When faced with serving a Deaf-Blind client, counselors have many legitimate concerns that need to be addressed. Concerns may include communication with the client, diagnosis and evaluation, counseling, housing skills training for the client; dealing with the inherent disincentives; employment issues; and the uncertainty of relating to a Deaf-Blind person.

Providing appropriate services to Deaf-Blind clients will require creating and networking a wide variety of services. The counselor is in a unique position to assist Deaf-Blind clients to develop their skills, interests, and talents which hopefully will lead to a more productive and independent lifestyle.

Discussion

When a counselor who is not a Deaf-Blind specialist is faced with providing services to a Deaf-Blind person, many concerns immediately surface: "Do I know enough to handle this? How will I communicate? What can this person do? Where can he live? How can she get appropriate services? Who can help me?" And perhaps underlying it all, the unspoken question, "Why me?".

The information that follows has been developed to assist the general counselor plan and provide a program of rehabilitation services. Particular attention is given to counselor concerns related to communication, case management, counseling, diagnosis and evaluation, disincentives, employment, housing, recreation, orientotion and mobility, serving the alder Deaf-Blind client, and counselor training.

Communication

Effective communication with the Deaf-Blind client is the number one priority for the rehabilitation counselor. The counselor, unless trained as a Deaf-Blind specialist, will not be proficient in the needed communication skills. Therefore, it becomes the counselor's responsibility to determine the client's preferred mode of communication and to arrange for these services (see Section II for a detailed discussion of communication).

Caseload Management

In serving the Deaf-Blind client, the counselor should be aware that additional time will be required. Home visits will need to be more frequent, and are important because of the valuable information the counselor can obtain by observing the Deaf-Blind person in his/her home environment.

Matters typically handled by telephone will have to be handled in person or by mail. Although TTY systems are available, few clients will have access to them. The evaluation and training time will also be greater than average.

Caseload size should be reduced for the counselor who serves Deaf-Blind clients. The actual caseload size that can be effectively handled will vary with the geographical distribution of the clients, as well as the severity of their disabilities. This is an issue that ligitimately concerns counselors and may need to be brought to the attention of the agency administration in order to effect change.

In providing services to Deaf-Blind clients there will be a need for networking among various agencies and organizations. The network will depend upon availability as well as resources needed to better serve this clientele. The counselor will in all probability need to serve as coordinator to assist those involved to stay aware of what each is doing in providing needed services.

Counseling Services

Individuals who became Deaf-Blind as a result of Usher's Syndrome or other adventitious causes, may require counseling in order to adjust to the disability. Isolation and loneliness are often cited by Deaf-Blind persons as their greatest problems. Family members are often distressed and may need counseling in dealing with having a Deaf-Blind person in the family. Their understanding and support of the Deaf-Blind person can determine the success of a rehabilitation plan. How does the counselor help the client deal with these problems? Often the counselor is not able to serve the client. Mental Health programs serving deaf persons are a good resource to begin with in states where they are available.

Disincentives

There are a number of disincentives which may slow down or deter the vocational rehabilitation process for a Deaf-Blind person. A counselor should be aware of these when working with a client in order to determine whether or not the person is truly interested in being rehabilitated, and to deal with overcoming the disincentives.

If the person needs rehabilitation training such as Orientation and Mobility, Braille or Daily Living Skills, but is **not** interested, the Counselor may want to explore alternative sources for providing services such as an Independent Living Program.

Diagnosis and Evaluation

Locating a resource able to evaluate the skills of a Deaf-Blind person may be even more difficult than finding appropriate diagnostic services. Possible resources are programs providing evaluations for either blind or deaf clients. It may be necessary to combine the services of two such programs in order to obtain a comprehensive evaluation. The evaluation should include an assessment of communication skills, daily living skills, orientation and mobility skills (travel skills), pre-vocational skills, and functional use of remaining hearing and vision. A thorough audiological as well as low vision evaluation is frequently indicated.

During the diagnostic and evaluation process, it is important to remember that institutionalized Deaf-Blind people may change their behavior when placed in a new situation. Any drastic change in routine, as is likely to occur in a rehabilitation program, can cause regression, behavioral changes or acting-out due to stress. The increased expectations suddenly placed upon Deaf-Blind clients when they enter a program may be the cause of this adjustment reaction to transition. The counselor needs to be aware that this may happen, and that time may be needed to allow for adjustment before determining that a client cannot handle a program. The same stress management techniques should be used for Deaf-Blind clients undergoing major life changes, as are used with any individual under stress.

Evaluation and adjustment cannot be separated and the counselors need to be constantly reassessing their clients' progress in the program.

Employment

Placement is a major concern for counselors. A common question is, "What types of jobs can a Deaf-

Blind person do?" Because Deaf-Blind persons are often viewed as being helpless, many people find it hard to even imagine what kind of productive work they might be able to do. Deaf-Blind persons have been employed in a variety of occupations, from teacher to computer programmers to assembly workers to cooks. A key to effective job placement is to not allow your imagination to be limited to those jobs which have been traditionally done by a Deaf-Blind person.

Housing

The VR counselor should be aware that many continuums of housing have been recommended for the Deaf-Blind population. Below is a general outline of possible housing alternatives. Some states may have all alternatives, plus others not mentioned. Other states may have very few options open to the client.

A. **Fully Independent Living:** Clients live in their own apartment or house and handle daily living needs without assistance from public social services.

B. **Semi-Independent Living:** Clients live in their own home, but an outside person makes regular visits. This person provides assistance or training based on client needs. This could include attendant care.

C. **Sheltered Independent Environment:** Clients live in their own home but services are available from an outside support agency. This includes housekeeping, transportation or food service. Included are boarding houses and adult and foster care placement. This type of placement can sometimes be found through mental health agencies.

D. **Group Home:** Clients are more closely supervised. They live with 24-hour-a-day houseparents in homes. Training is provided by staff in areas of daily living. Emphasis is placed on developing life skills for less supervised living arrangements.

E. **Self-Contained Living:** This is similar to the state hospital with a resident population. This is usually provided through a mental health agency.

F. **Total Care:** This is for clients with complicated medical problems. This is a nursing home situation with full-time health related staff.

When the options listed above are not available, the overall rehabilitation of the client may be adversely affected since locating appropiate housing is crucial before the client begins employment. Counselors may need to help their clients advocate for the establishment of appropriate options.

Recreation

Although recreation is out of the usual realm of the rehabilitation counselor's responsibilities, it can be important to the livelihood of the client. The counselor, by networking various community agencies, volunteer groups, and not-for-profit organizations may create a more meaningful and successful environment for the client.

Occasionally the Deaf-Blind client becomes dependent upon the counselor for socialization. The counselor should be aware of this possibility when developing a recreational program and help the client understand that the counselor's role is to help him or her develop socialization skills, **not** to fill that need.

Orientation and Mobility (O & M)

The ability to move safely and as independently as possible within the environment is crucial to Deaf-Blind clients. Without this basic ability, many other areas of their lives may become extremely limited. Lack of independent mobility is one of the primary causes of the lonliness and isolation that so many Deaf-Blind clients experience. For this reason, the counselor should pay careful attention to assuring that the client learns to travel as independently as possible; be it cane travel, dog guides, or use of sighted-guide techniques.

In providing orientation and mobility (O & M) services, the counselor and O & M instructor will need to cooperatively consider the time, degree and mode of occurrence of the client's disabilities in determining needs, goals and limitations. The counselor needs to assure that the mobility specialist has up-to-date medical, educational, psychological and social records, particularly hearing and vision reports. The instructor will need to assess carefully the ability of the student to use his/her residual vision and/or hearing effectively in the environment in order to determine what methods of travel will be used. Because of the diversity within the Deaf-Blind population, some persons will be able to use their residual vision to travel, others will use their hearing. The mobility specialist will need to assess the client's understanding of the physical environment and ability to transfer knowledge from one situation to another.

Serving the Older Deaf-Blind Client

There is an increasing number of older Deaf-Blind persons. Many of the leading causes of blindness (diabetes, macular degeneration, cataracts) and hearing impairments (presbycusis) occur in older persons. Some individuals are able to receive services with the goal of homemaker, especially if these services prevent institutionalization. Many older Deaf-Blind people, however, are not eligible for VR services. Independent Living Programs may be used to provide training on independent living skills, orientation and mobility, socialization, and recreation.

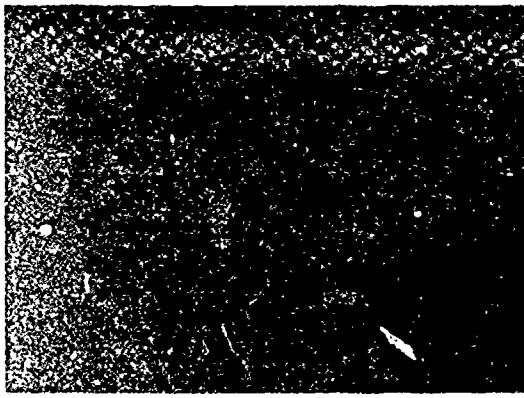
Counselor Training

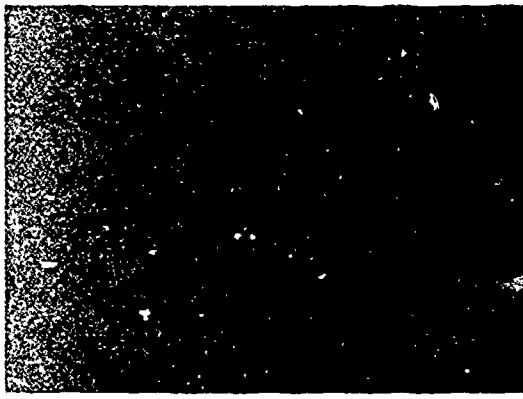
Counselors who are not experienced in serving Deaf-Blind clients should seek in-service training. The Helen Keller National Center, Gallaudet College, Arkansas Rehabilitation Research and Training Center on Deafness/Hearing Impairment (RT-31), Mississippi State University, and a variety of other training programs provide training in this area.

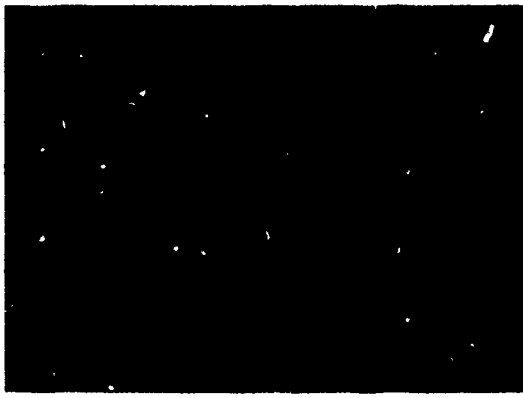
The following guide should be useful not only to counselors, but to any professional serving Deaf-Blind individuals.

GUIDELINES

1. When you approach a Deaf-Blind person, let the person know—by a simple touch—that you are near. A warm, firm handshake will show your friendly interest.
2. Make positive but gentle use of any means of communication you adopt. Abrupt or exaggerated gestures might be disturbing or misunderstood.
3. Work out with the person a simple but agreed signal for identifying yourself.
4. Learn and use whatever method of communication the Deaf-Blind person knows, however elementary. If a more adequate method might be valuable to the person, help him/her learn it.
5. Always be sure the Deaf-Blind person understands you, and be sure that you understand him/her.
6. Encourage the Deaf-Blind person to use any speech that is possible, even if it is limited to only a few words.
7. If there are others present, let the Deaf-Blind person know when it is appropriate to speak.
8. Always inform him/her of the whereabouts of others present.
9. Always tell the person when you leave, even if it is only for a brief period. See that he/she is comfortably and safely situated. If not sitting, provide something substantial for him/her to touch before leaving. Never abandon a Deaf-Blind person in unfamiliar surroundings.
10. In the company of a Deaf-Blind person, maintain close physical contact to show you are there.
11. In walking, let him/her take your arm. Never push a Deaf-Blind person ahead of you.
12. Make use of a simple set of signals to let him/her know when you are about to (a) ascend a flight of stairs, (b) descend a flight of stairs, (c) walk through a doorway, (d) board a vehicle. A Deaf-Blind person holding your arm will readily sense any change in pace or direction.
13. Encourage Deaf-Blind persons to use their own initiative and ability, however limited. Encourage them to express their own ideas. Encourage their interest in new experiences.
14. Rely on your natural courtesy, perceptiveness, and common sense. Avoid getting flustered or irritated if misunderstandings arise. Occasional difficulties in communication are only to be expected.

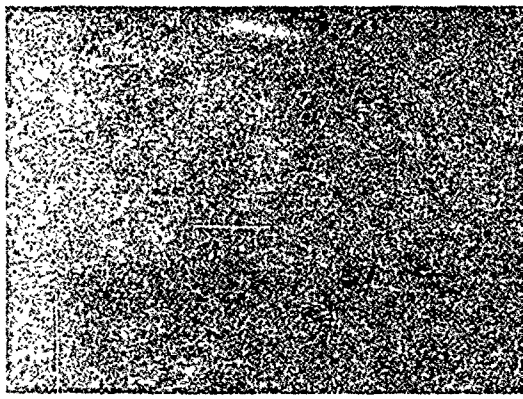


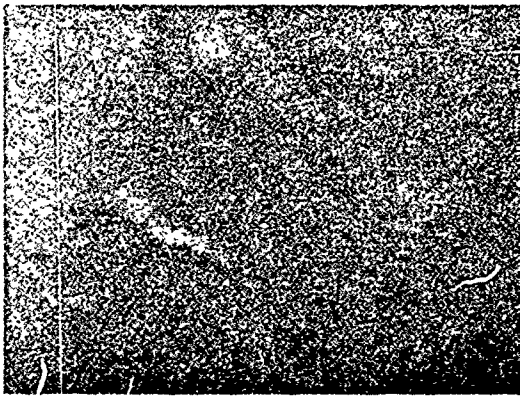




Give a man
a fish
and he
eats today
...teach him how
to fish
and he
can eat fish
(take care of self)
all his days.

Old Chinese
Proverb





The Vocational Rehabilitation Process

Objectives

1. To identify special considerations associated with each step of the service delivery process in the State-Federal Program of Vocational Rehabilitation for Deaf-Blind Persons.
2. To discuss ways that these considerations can be effectively accommodated in implementing and providing VR services.

Summary

The rehabilitation process for Deaf-Blind persons, as with other disability groups, consists of a planned sequence of services related to the total needs of the individual Deaf-Blind person. The process evolves around the specific rehabilitation service needs of the individual Deaf-Blind client and the efforts of the client's vocational rehabilitation counselor to assist the client in obtaining the services needed and thus to achieve the vocational adjustment of the Deaf-Blind individual.

The process begins with the initial casefinding or referral of a Deaf-Blind individual to the state rehabilitation agency and culminates with the successful placement of the individual on a job, or in an alternative situation compatible with the client's abilities, interests and resources. A wide range of services, both ordinary and extraordinary, are needed in order to provide for effective rehabilitation interventions on behalf of Deaf-Blind individuals. Special or extraordinary service considerations in each step of the rehabilitation process are presented in this chapter.

Discussion

A. Casefinding and Referrals (Status 00-02)

Vocational Rehabilitation is a legal right of all Deaf-Blind persons who meet the criteria for elegibility. Casefinding is essential to the fulfillment of this right. Before Deaf-Blind persons can benefit from vocational rehabilitation services, they must be informed that such services are available. A special effort and a sophisticated plan for casefinding needs to be developed by the VR agency. Such plan should be inclusive of all conventional procedures such as contacts with regular and special schools, hospitals, churches and clergymen, doctors, and parent groups. A review of VR cases closed in status 08, 28, and 30, over the past few years, is another important casefinding method. In addition, contacts should be made with the Deaf community, the Blind community, and, as exists in some areas, the Deaf-Blind community. It is seldom that a Deaf-Blind person is not associated with one or more of these resources, so the best casefinding method is to have a visable program of effective services which will have a magnet effect. Effective communication in a mode preferred by the Deaf-Blind persons often can spell the difference in making them realize that help is available. Deaf-Blind persons who prefer to communicate in sign language will often learn from their peers that the VR agency has staff who can communicate by their preferred mode and will feel comfortable in seeking services. The same applies to braille and other communication modes of Deaf-Blind persons. Any printed media used to provide information about VR services should be mode available in braille, large print, captioned, or by whatever means will enhance comprehension by Deaf-Blind persons.

B. Eligibility Determination

The criteria for eligibility for vocational rehabilitation are set forth by federal regulations, The basic eligibility requirements are:

1. The presence of a physical or mental disability which for the individual constitutes or results in a substantial handicap to employment; and

2. A reasonable expectation that vocational rehabilitation services may benefit the individual in terms of employability.

Presence of a Physical or Mental Disability

With Deaf-Blind persons there is seldom any difficulty in meeting this criterion. Medical data resulting from examinations of the hearing mechanism by an otologist and/or audiologist, and the visual mechanism by an ophthalmologist or optometrist should suffice to establish the presence of physical disability. Not all eye care specialists have knowledge and experience in working with diseases and defects of the eye. Selection of an appropriate diagnostician is critical in pursuing medical diagnosis of sensory deficits. Also, not all eye and ear specialists report well on the extent of vision and hearing loss. It is therefore imperative to identify physicians and clinicians who are capable of accurate testing and reporting, since such reports are to be used as the basis for elegibility. Physicians with experience with the Deaf-Blind are always preferred. The principal consideration, once the medical data is obtained, is the effect that the hearing and visual disabilities have on employability.

Reasonable Expectation

The second criterion is often difficult to ascertain with Deaf-Blind persons. This is a unique population and should not be compared to those populations of Deaf persons or Blind persons. Deaf-Blind persons should be evaluated for what they are and are not in comparison to others. The VR Counselor does have the responsibility to reasonably determine that there is a likelihood that VR services will render the individual able to achieve vocational goals consistent with his capabilities and abilities. The agency must evaluate and determine capacity of the Deaf-Blind person for employment, with consideration given to the effect the VR services may have toward reaching this goal. The reasonable expectation determination should be made on the basis of employability and not on the basis of such factors as where the client lives or past history of employment of other Deaf-Blind persons. All available medical, educational, vocational and social information regarding the individual should be obtained and reviewed in making the reasonable expectation decision. Medical data may be obtained either by authorizing examinations or obtaining available current information. Schools, hospitals, and other agencies which have previously worked with the Deaf-Blind client, should be contacted to request information. In the event that it is not possible to make the reasonable expectation decision with available information, then an extended evaluation of up to 18 months may be the necessary course of action. This is a frequent means of ascertaining vocational potential with Deaf-Blind individuals when there is an inability to make the determination on the basis of available information. Vocational Rehabilitation services can be provided for a period of up to 18 months under extended evaluation until a determination of eligibility or ineligibility can be made.

C. Medical Diagnosis

A medical diagnosis is an eligibility requirement for vocational rehabilitation services. For Deaf-Blind persons this usually means a general medical examination, an otological examination, and an ophthalmological examination. Further medical examinations may be required to ascertain the presence of other disabilities. Diabetic screening should always be done in the examination process. Care should be taken to ensure that the physicians who perform the specialized examinations are familiar with the unique characteristics of visual loss—for example, Usher's Syndrome. It is not uncommon for a person with Usher's Syndrome to partake in a visual examination with the resulting medical report making no mention either of loss of visual fields or the presence of retinitis pigmentosa. The VR Counselor who authorizes the examination should communicate with the physician prior to the examination, indicating symptoms, if visual loss in some form is suspected. An interpreter should be

provided for the examination in most instances. Whenever possible, the visual examination should be done by a low vision clinic or other clinics that may have all the equipment needed for highly specialized examinations. The medical diagnosis should indicate any recommendations for correction/restoration of vision and hearing or other disabilities if present.

D. Vocational Evaluation

Few vocational evaluation tests and procedures have been standardized for use with Deaf-Blind individuals; most that are available were standardized for use with children and youth. Many of the tests and procedures in use with Deaf-Blind adults yield questionable results, being borrowed from procedures developed specifically for standardized evaluation of Blind, Deaf, and/or general client groups. Vocational rehabilitation personnel engaged in service to Deaf-Blind adults should assign priority to the development and adaptation of vocational evaluation tests and procedures that can be used with confidence in rehabilitation assessment of Deaf-Blind persons. Lacking such instruments at the present time, the most effective vocational evaluation procedures available are those that rely more on the experience and observation skills of evaluation personnel and less on test data. Evaluators skilled in service to Deaf-Blind clients, as well as in adaptive vocational evaluation procedures, have proven to be the most successful in assessing the life potentials and abilities of these clients. Effective vocational evaluation procedures for Deaf-Blind persons usually include the following adaptive characteristics:

Evaluation personnel - Skilled by virtue of training and/or experience in vocational evaluation and services to Deaf-Blind persons. Although in scarce supply these professional personnel make a significant difference in the quality of services. In addition to providing for more and better pre- and in-service training of professional personnel in evaluation of Deaf-Blind persons, better use may be made of scarce personnel by operation of comprehensive evaluation programs in strategic geographical centers to serve the need of Deaf-Blind clients in defined catchment areas.

Extended evaluations (Status 06) - The complexity of the combined disabilities, combined with the need for creative adaptations in the evaluation process will usually require the full use of the 18-month extended evaluation periods. This extended period will permit VR to more fully and appropriately evaluate the life and employment prospects, abilities and potentials of Deaf-Blind clients.

Situational assessment - Lacking appropriate evaluation procedures for standardized use with this client group, situational assessment procedures are usually most effective, especially when performed by experienced professional personnel. Creative use of work sample tasks, rehabilitation workshop tasks, or employment situations are of demonstrated superiority in assessment practices.

Rehabilitation workshops - The most productive setting for evaluation of Deaf-Blind persons is found in those programs that are housed within, and creatively utilize, the rehabilitation workshop as the evaluation laboratory. Using real or simulated work tasks and a work environment as the setting for evaluation provides for a realistic assessment of individuals' global work personalities and abilities as well as their aptitudes in performing specific kinds of work tasks.

There are many differences and variations in the life and employment prospects of each Deaf-Blind individual; therefore the evaluation program should be designed to individualize its assessment of each client. Qualified professional personnel and creative assessment adaptations are the foundations of effective evaluation services for these individuals. As it is doubtful that each of the 50 states has sufficient numbers of clients in need of evaluation services to justify the costs of maintaining a quality program, some may benefit by sharing a

regional vocational evaluation program, thereby promoting operating economies and qualitative services. Added costs could be expected to be offset by better quality evaluation services.

E. Counseling And Guidance (status 14)

Counseling and guidance is a mandated service for all clients accepted for VR services. Since traditional counseling approaches utilize primarily oral communication to deal with cognitive and emotional adjustment, Deaf-Blind clients frequently present unique counseling problems. In a counseling relationship with a Deaf-Blind client, the counselor's effectiveness depends on his communication skill. The 1978 amendment to the Rehabilitation Act (P.L. 95-602) specifies the clients' right to determine the mode of communication by which they communicate with VR personnel. These requirements for effective communication should guide the staffing and assignment of VR counselors to a Deaf-Blind caseload (see chapter on communication for an expanded discussion).

The counselor experienced in communication and service with Deaf-Blind persons can make a significant contribution to the client's rehabilitation progress. By combining medical data from the physician, psychological data from the psychologist, vocational evaluation data from the evaluator, and his own special information about the client, the counselor can work together with the client to arrive at an individualized written rehabilitation program (e.g., IWRP) which is acceptable to both the client and the counselor, and which offers the client the best possible chance of achieving life satisfaction and success. Several simple techniques found productive in use in the counseling interview with Deaf-Blind persons include:

1. Communicate in mode preferred by the client.
2. Use clear and simple language.
3. Allow the client to indicate the rate at which words are transmitted.
4. Economize and be precise in selection of words.
5. Break down a long series of directions into short sequences.
6. Restate information or statements as necessary.
7. Assist the client in self-expression as indicated.
8. Budget more time for counseling interviews to accommodate the slower rate of communication that is often necessary.

Such simple techniques can greatly increase the comfort levels of the client and encourage the development of a satisfying and productive counseling relationship.

F. Training (status 18)

The majority of Deaf-Blind clients participating in the vocational rehabilitation program can benefit from training programs: (1) work adjustment training and/or (2) job training. These two service areas will be discussed in terms of the rehabilitation needs of Deaf-Blind persons.

1. Work Adjustment Training

A majority of Deaf-Blind clients seeking vocational rehabilitation services have had little, if any, prior work experiences. Many can profit from work adjustment training that includes: a planned continuum of work experiences, work adjustment guidance and counseling, and related adjustment services. Work adjustment training activities teach work-related behaviors and develops the individual's abilities to work at production rates sufficient to meet the demands of competitive industry. The goal is to develop the work tolerance and skills that will permit the client to function on a job, whether sheltered or competitive.

Rehabilitation contract workshops, or related adjustment workshops, have proved to be the most productive settings for providing realistic work experience to Deaf-Blind clients. These program settings can be used to expose the client to a stimulative work environment in which he can learn appropriate work behavior. These behaviors can be stimulated and shaped on a gradual basis in the workshop setting, combining close supervision and on-going adjustment to assigned work tasks and production demands. Adjustment personnel can individualize the client's program in order to stimulate and maintain more appropriate work behavior by the client.

2. **Job Training**

The counselor places the client in status 18 when he actually begins receiving training services at a public or private school, employment training or training at some other facility.

a. **Special considerations for Deaf-Blind clients in job training:**

1. Training must be communicated well to be effective. Selection of a training site must take into account the suitability of an effective communications environment. All of the state's resources for Deaf-Blind clients should be considered in selecting an appropriate training program. Few such training programs exist in most states.

2. Frequently, interpreters, note takers, and tutors become essential rather than supplementary services if training is to be meaningful in many programs.

3. Whenever available, training in a facility which is staffed to serve Deaf-Blind clients is preferred.

4. Many general training programs can be effectively used for a Deaf-Blind client if approrpriate interpreting and supplementary services are provided.

5. Many Deaf-Blind clients will require a longer period of time for job training than general clients do. Training services can therefore be more costly for these clients.

6. Although many Deaf-Blind people are employed in "blue collar" or sheltered work, individuals are successfully employed in a variety of levels and fields of employment. Training should therefore be compatible with each client's interests and abilities.

7. Due to the communication modalities which Deaf-Blind people use, training must usually incorporate individual instruction and extremely small staff-to-client teaching ratios.

8. Many Deaf-Blind clients will require extensive training which is specific to a given work skill, and will therefore require retraining at various points in their lives, as job duties shift or expand.

b. **Some Model Programs for Training:**

On the job training is being discovered to be the single most effective

means of training Deaf-Blind clients for both competitive and sheltered employment. Numerous model projects exist which have utilized on-the-job training for Deaf-Blind clients, most of which have been funded by the U.S. Office of Education. These models have incorporated a research design, which has demonstrated that such training is both programmatically effective and cost-effective. Some of the better-known projects incorporating on-the-job training include:

Project Advance, Perkins School for the Blind, Watertown, MA

Innovative Vocational Project, Region XX School District, San Antonio, TX

O.J.T. Program, Helen Keller National Center, Sands Point, N.Y.

Hawaii Model Rehabilitation Project for Deaf-Blind Clients, Hawaii Division of Vocational Rehabilitation and Hawaii School for the Deaf and Blind, Honolulu, Hawaii

All of these projects have demonstrated that on-the-job training works, and individual data on each project is available from the respective sponsoring agencies. An OJT model by its nature requires some employer flexibility, allowing a training professional to be in the workplace to train the client. Employers require reassurance that work flow and productivity will not be negatively affected, and that training staff will be withdrawn as quickly as client independence is achieved. Research studies have shown that it is not so much a lack of a particular job skill which presents the Deaf-Blind person with difficulties during and after placement, but more frequently other factors. These include:

1. **Work-related behavior** e.g., the client is not punctual, behaves inappropriately while working, does not know how to use break times, cannot deal with "down time" when there is less work to do, etc.

2. **Communication difficulties** e.g., other personnel do not know sign language, the client cannot write intelligible notes, client and manager misunderstand each other.

3. **Dependence in mobility** is a constraint for a large percentage of Deaf-Blind people. Many lack the travel skills necessary to independently travel to places of employment, despite having good work skills.

All of the above present a concrete rationale for on-the-job training, since training in all of these areas can best be achieved in the work site. In addition, the **learning style** of many Deaf-Blind persons is more suited to on-the-job training programs as opposed to a "train-then-place" model, since many learn better by doing.

c. **Projects with Industry (PWI)**

These projects represent an attempt to develop a link between the employer and the rehabilitation program, with each having equal responsibility to provide services leading to employment. These

projects represent a concrete formalization of on-the-job training. The rehabilitation program and employer jointly select clients, train and place them. Such models have been developed and used successfully with Deaf clients at the Seattle Speech and Hearing Center and Tulsa Speech and Hearing Center. (See Evans and Shiels, 1983). For a more detailed account of the techniques used in PWI programs with general clients, see **Research Utilization Laboratory-Report Number 9** issued by Chicago JVS (1978).

G. Job Development/Placement (Status 20, Ready for Placement)

The individual is placed in status 20 when he has been prepared for employment and is ready to accept a job, but has not been placed, or has not yet begun employment.

Placement is frequently a great concern for counselors. "What types of jobs can a Deaf-Blind person do?" is a common question. Because Deaf-Blind people are often viewed as being helpless, many people find it hard to even imagine what kind of productive work they might be able to do. Again, we must emphasize the multiplicity of Deaf-blindness. Deaf-Blind people have many varying degrees of vision and hearing and possess an equally wide variety of skills. When considering placement, the counselor must look at the total person, as with any other client, and attempt to match his unique talents, skills and interests with existing jobs in the community. This is not any easy task, but a possible one. Advancing technology will also create options for creative placement.

Deaf-Blind people have been employed as everything from teachers to computer programmers to assembly workers to cooks. A key to effective job placement is to not allow your imagination to be limited to those jobs which have previously been done by a Deaf-Blind person. It cannot be overstressed that each person needs to be viewed individually, and careful job analysis done to determine the actual skills required on the job.

If Deaf-Blind persons are to access the jobs of tomorrow, job placement practices need to be reevaluated and refocused. The research literature indicates that there is a need to expand programs which provide career education and guidance (Bullis and Watson, in press) and occupational information and exploration (Marut and Watson, in press), from early adolescence through the retirement years. Our placement practices must be restructured to incorporate those approaches and techniques which have proven most effective in contemporary use. The Helen Keller National Center (HKNC), which provides placement services and consultation to states on placement of Deaf-Blind clients, supplies the following placement data on persons who have received training at the National Center. (All data based on 139 former trainees from July 1982 to June 1983):

In Remunerative Employment	42.4%
Unemployed	57.6%
TOTAL	100.0%
In competitive employment	23.0%
In sheltered workshops	61.2%
In work activities centers	13.7%
In family enterprise/homebound	2.1%
TOTAL	100.0%

In addition, the HKNC data shows competitive employment and homebound industry on the decrease, and sheltered work and day activity center employment on the rise. This may be due to an increase in multiple handicapping conditions which the Rubella wave clients are presenting. Some of those reported as sheltered workers may also have been capable of

more competitive work and less restrictive settings, were there more innovative supportive work models in existence. Therefore, the data must be viewed as a statement of post placements rather than an indicator of potential for the Deaf-Blind population.

Strategic Job Placement Interventions

1. **Job-seeking skills programs:**

   The best known use of this approach was developed at the Minneapolis Rehabilitation Center (Anderson, 1968). This approach provides clients with training in:

   a. identifying personal job-related assets
   b. presenting assets effectively
   c. handling questions about disability or past personal problems
   d. assessing helpful labor market information
   e. approaching employers, completing applications, interviewing
   f. grooming and attire

   Extensive role playing and videotaping are successful elements for providing client feedback. Successful results with Deaf clients are reported by Torretti (1982), and similar strategies were used successfully by Goros, et al (1984), working with Deaf-Blind clients at Perkins School for the Blind.

2. **Job-Finding Clubs**

   Combine training in self-directed job-seeking skill (U.S. D.O.L. Report, 1981) with other features similar to behavioral group counseling. The focus of the process is a full-time job search with group support. Azrin and Philip (1979) report that the job club method can best be described as "an intensive behavioral counseling program based on the view of job finding as involving interpersonal skills, a social information network, motivational factors and the obvious need for job skills (p. 144). In intensive full-time job-search, counseling sessions are held daily (e.g., 3-4 hours each day) to provide a structured setting within which to review the job search activites the client performed outside of the counseling session. Behaviors are maintained by self-monitoring (logging employer contacts), counselor encouragement and family support.

   The effective use of job clubs in service to Deaf clients is summarized by Ouellette and Dwyer's (1984) national survey which found that:

   > "Teaching (Deaf) clients job-seeking skills individually or in a classroom atmosphere and establishing job clubs which provide support to clients as they implement their job searches are two of the most popular self-directed search strategies"(p. 14).

   Recent articles by Torretti (1983) and Evans and Shiels (1983), and Dwyer (1983) describe the effective use of job club techniques with Deaf client groups in additional detail. The interested reader can review those three articles for a more detailed and broader discussion of specific job club techniques and procedures found effective in use with Deaf clients. Although reported effective in use with Deaf clients, no controlled studies have been conducted in the use of these techniques with Deaf-Blind persons. The University of Arkansas Rehabilitation Research and Training Center on Deafness and Hearing Impairment currently (Watson, in press; Watson, 1982 a & b) is conducting controlled research studies on the use of job club techniques with Deaf persons. Results of this research should be available to the field by 1985.

3. **Job analysis and modification**

Involves analyzing a particular job and adapting it so that it can be performed by a Deaf-Blind person. This analysis is best conducted by an on-site review of the job site, with adaptations made to suit the needs of the individual client.

The Employment Placement Analysis developed by **Project Advance**, can be a useful tool for this purpose. Special considerations to job analysis and modification for Deaf clients are described in Watson (1977, pp. 90-94). Techniques and procedures for job analysis as part of the job placement effort are further described by Engelkes (1979, p. 130). Further information on the use of job modification techniques can be acquired in these two articles.

4. **Supported interviews**

When a client is incapable of handling an interview alone, a supported interview, with counselor or placement specialist present, can be most helpful. The supported interview can also do much for alleviating employers' and coworkers' fears and anxieties. An interview occurs with the help of a professional to interpret for both parties, resulting in a comfortable atmosphere for all. Many Deaf-Blind people require more than a literal interpreter in an interview, and can benefit from such support. Employers need advice that contradicts the "myths" related to Deaf-Blind persons regarding insurance, workmen's compensatin, and related misconceptions.

5. **Statewide placement systems**

A systematic, concentrated approach to the problems of job acquisition, with a strong emphasis on employer relations and job-seeking skills training has been developed by the State of Michigan DVR (Molinaro, 1977). The system includes:

a. an account system in which counselors and placement specialists develop relationships with large employers,
b. a skill bank registry of job-ready clients,
c. a job bank of openings throughout the state,
d. job seeking skills clinic and job-finding clubs,
e. staff development training and direct joint efforts by placement specialists and counselors,
f. labor market projections,
g. sheltered-shop placements to develop competitive work skills,
h. group vocational counseling, and
i. employer support assistance-awareness, troubled employee assistance, etc.

The program, as described by Molinaro (1977), presents a model for a comprehensive program that encompasses most all major approaches to job development and placement into a unified statewide placement system. The merits of developing such a system for Deaf-Blind people are rather obvious considering the many advantages that can be obtained by the pooling and coordination of personnel and resources on a statewide basis. A system of looking for jobs for numerous Deaf-Blind clients simultaneously can produce more effective results, and be more time-effective. Possibilities of job-sharing also become more clearly defined through such a system.

H. Follow-Along Support Services (Status 22: In employment—Status 32: Post-employment services)

The traditional view of clients in Status 22 is that they are employed, and receiving a minimum of 2 months of follow-up by the counselor after placement, and at the adequate adjustment, the case is closed (Status 26).

Likewise, Status 32, or post-employment services, are defined as on-going services which a client needs in order to retain his employment. This is traditionally regarded as a **crisis** service, a service which is offered only as a major problem arises. It must be stated that, for many Deaf-Blind clients, follow-up services (Status 22) and follow-along services (Status 32) need to be far more comprehensive than is the custom in most states. Interpreting support services are required to asssist the client, employer, and co-workers during the initial on-the-job adjustment period. Ongoing contact with the client (personal visits at work or home) and employer will be required in order to assure adjustment and satisfaction.

When one contemplates the potential issues that a Deaf-Blind person faces in employment, one can clearly see the rationale for support services and follow-along services to be comprehensive and ongoing, rather than merely crisis-oriented. Assistance is frequently needed by the client in:

(a) Negotiating with one's employer the on going terms of employment
(b) Receiving ongoing on-the-job instructions and communications
(c) Maintaining reasonable relationships with coworkers
(d) Retraining periodically as the client's duties change or expand
(e) Negotiating new transportation alternatives
(f) General troubleshooting, in order to assure retention of employment

Such adaptations to traditional service delivery are novel to most rehabilitation agencies, and certainly have their implications for counselor caseload and the cost of serving Deaf-Blind clients. However, rehabilitation service to this population is required, and can be cost-effective for society, if the end results are (a) more Deaf-Blind persons employed than unemployed, and (b) less job turnover, and consequently less retraining, for each client. To extract some vocabulary from 504, such **adaptations** and **accommodations** on the part of rehabilitation agencies are **reasonable**, and even necessary if Deaf-Blind persons are to have **access** to the services of the rehabilitation network.

I. Independent Living Training (Title VII)

Few communities currently offer Deaf-Blind persons a comprehensive program for independent living services, staffed and equipped to provide the range of services necessary for full integration of Deaf-Blind persons into community life and the labor force. Developing independent living service programs for Deaf-Blind persons remains a high priority for the State-Federal Program of Vocational Rehabilitation.

Public Law 95-602, the 1978 Amendments to the Rehabilitation Act of 1973, requires independent Living Programs to offer a combination of services which as a minimum include information and referral, financial benefits counseling, peer counseling, and transportation. Deaf-Blind clients may need additional specialized services such as teletypewriter (TTD) and Braille Teletypewriter (Braille - TTD) services, interpreting services, reader and/or mobility services, attendant care, housing, communication, recreation, and related support services. A comprehensive description of adaptive independent living services that need to be made available to Deaf-Blind persons is provided by Watson, Barrett and Brown (1984, pp. 14-22). The list covers a broad spectrum of services which may be provided at a central facility, at cooperating agencies, or a combination of central and off-premise services. The independent living training needs of individual clients will vary greatly. Twenty-five common needs are listed on the following page.

Client Needs
For Independent Living Training

Community Education/Awareness
Family Services
Transportation
Housing Information & Referral
Accessibility Compliance Review and Modification
Legal Services Information and Referral Care Attendants
Telephone Relay
Health Service Referral
Recreation
Group Homes
Clustered-Site Apartments
Scattered-Site Apartments
Semi-Supervised Shared Living
Independent Living Support
Dormitory Services
Job Bank
Peer Counseling/Peer Resource
Interpreting/Translators
Companion Service/Personal
Volunteers
Counseling
Orientation and Mobility
Respite Care
Advocacy
Information & Referral

Training of rehabilitation staff today is difficult for agencies, state directors, and staff development supervisors as a result of numerous new priorities and areas of emphasis.

Staff training is costly and time consuming; but with consideration to all the new developments and new program requirements within rehabilitation, it is of vital importance.

Fourth IRI,
The Rehabilitation of the
Severely Handicapped Homebound
1977

Utilization of the Document

Objective

To present tentative guidelines for rehabilitation trainers to use in planning, designing and implementing training programs for the rehabilitation of Deaf-Blind clients.

Summary

With the advent of Deaf-Blind clients into the rehabilitation process, agencies and organizations must be prepared to specify their goals and objectives for serving this population. When this is completed they must provide the needed training and the resource development in order to achieve the specified goals and objectives. This unit is for the use of trainers in helping their agencies develop programs which will enable personnel to better identify, assess, plan and serve Deaf-Blind persons. The following information is presented for consideration in planning programs. Sample training outlines are also included.

Discussion

The primary reason for training rehabilitation personnel in the area of Deaf-Blind is to increase the quantity and quality of services to this population and/or increase the numbers served. Staff development personnel will be directed to develop and conduct training programs for their agencies which will ultimately determine the success of services to Deaf-Blind persons. Training programs not only provide information on serving Deaf-Blind clients but permit the trainees to share and discuss ideas in formal as well as informal sessions. Training is not the penacea but when well planned and organized, training sessions can be very beneficial in clarifying issues and concerns as well as facilitating service to clients who are Deaf-Blind.

Planning Training Programs

If rehabilitation agencies are to successfully serve Deaf-Blind clients, then it is imperative that all levels of agency personnel participate in training. The needs of Deaf-Blind individuals can be met only through the assistance of a trained and knowledgeable staff in an agency that is committed to serving this clientele. This training should focus on the population, special needs, resources, and staff responsibilities as well as on attitudes, concepts, and agency policies. Training should be directed toward:

1. agency administrators
2. upper and middle management
3. field and facility supervisors
4. rehabilitation counselors
5. support staff (adjustment services personnel, vocational evaluators, psychologists, medical staff, placement, recreation, dorm supervisors, etc.)
6. clerical staff

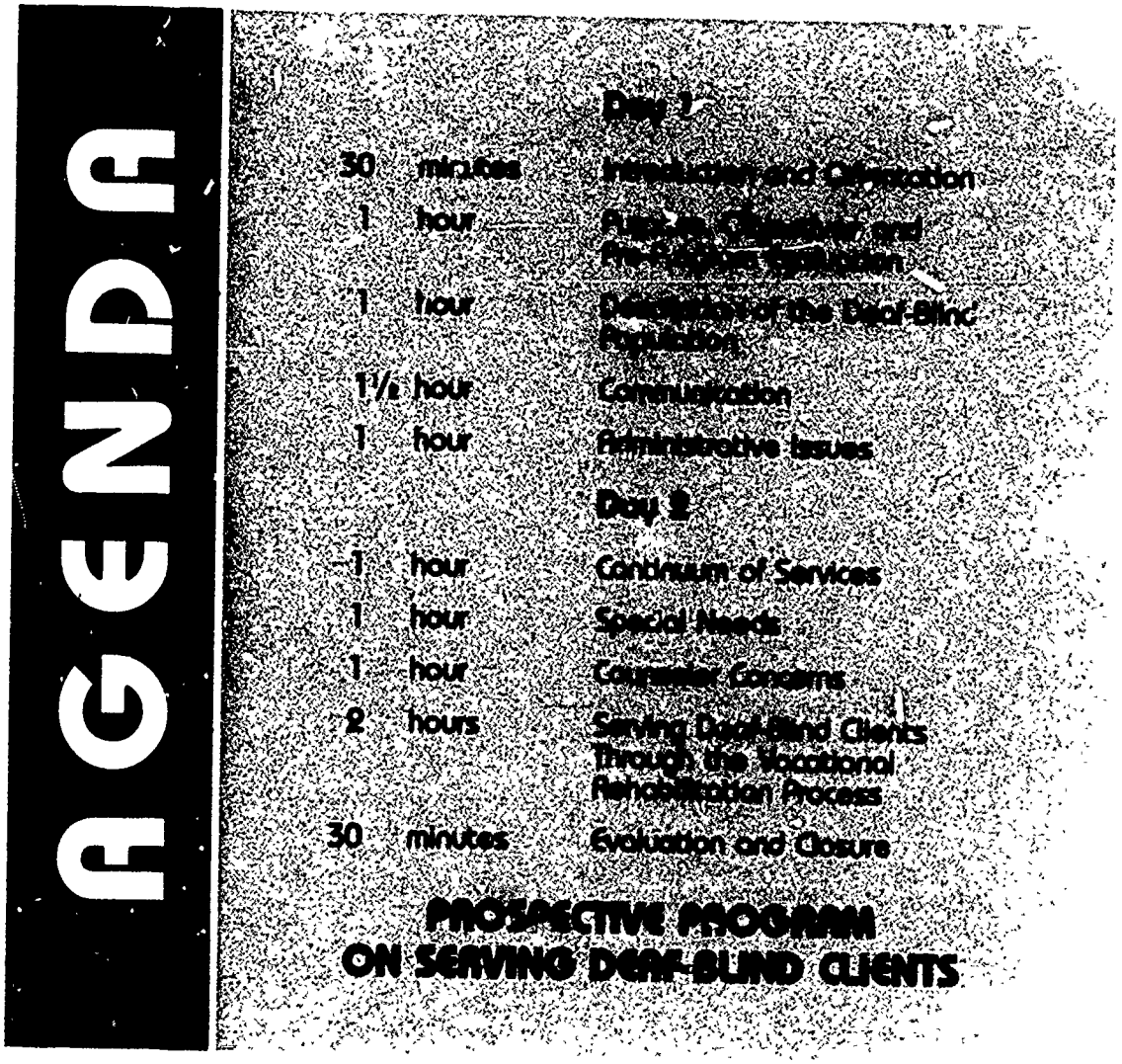
Content

The committment and implementation of services to Deaf-Blind individuals will vary from one state agency to another, and this will determine the type and extent of staff development or training. Nevertheless, several general and specific components should be considered for inclusion in any training program.

Information: The Deaf-Blind population history, philosophy and legislative perspective
Communication

Services: Administrative issues and concerns
Continuum of services
Special needs of Deaf-Blind clients
Counselor concerns and issues
The vocational rehabilitation process
Resources

The following training modules and sample agenda emphasizing general information objectives are presented as guidelines for staff development and trainers with the understanding that the needs of agencies will differ. Further, training may be utilized for specific purposes (counseling Deaf-Blind clients, interpreting, vocational training, etc.) for specific staff members.



TRAINING MODULE FOR SERVING DEAF-BLIND CLIENTS

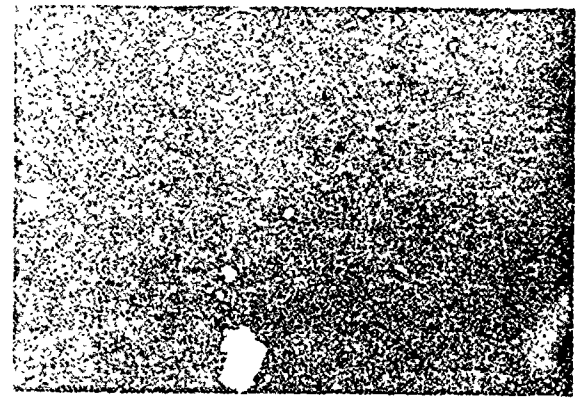
Content	Outcome	Methods & Materials	Trainers
Introduction/ Welcome	Participants will be made aware of workshop goals. Why they were selected to attend. What the training is about. What will be learned.	Registration Forms Lecture IRI Manual	Staff Development Supervisor Training Coordinator
Overview of the Deaf-Blind Population	Participants will have a historical perspective of Deaf-Blind clients. Will be introduced to relevant issues in SLD.	Slide/Tapes Handouts IRI Manual Selected Literature	Staff Development Supervisor Psychologist Training Coordinator Agency Administrative Staff
The Deaf-Blind Population	Participants will gain understanding of Deaf-Blind and who and how the agency will serve this clientele.	Lectures IRI Manual Handouts, Films Small Groups	Agency Administrator Deaf-Blind Specialists Counselors
Administrative Issues and Concerns	Participants will become aware of critical issues and concerns of agencies in implementing services to the Deaf-Blind.	Lectures, Overhead Tape/Slides	Agency Administrators Program Managers Supervisors
Delivery of Vocational Rehabilitation Services	Participants will become informed of agency policies regarding referral, screening, diagnosis, eligibility, severity of disability, needed services, and placement.	Lectures Large & Small Group Discussions IRI Manual, Agency Manual Regulations & Guidelines	Staff Development Personnel Program Managers Supervisors
Wrap-up and Evaluation			Staff Development Supervisors Training Coordinator

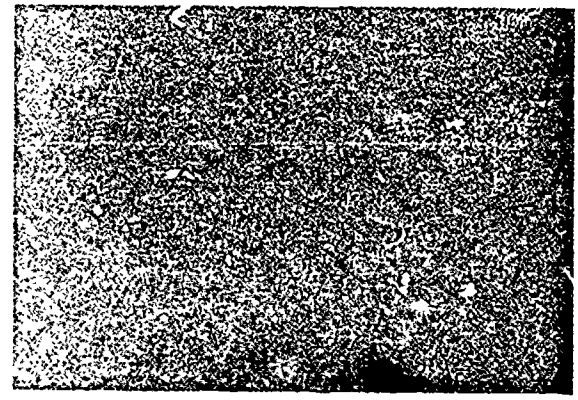
With the extension of rehabilitation services to Deaf-Blind individuals and as agencies begin to provide these services to an increased number of these persons, there will be a need for additional information.

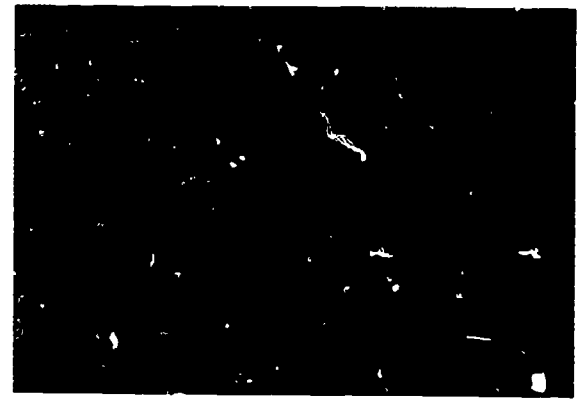
This unit provides a number of resources that can be contacted for assistance.

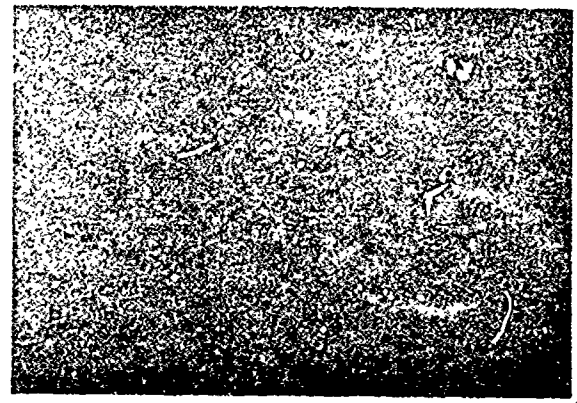
In no way should this be interpreted as an all inclusive list, for there are many others.

Further, it is anticipated that as services increase for Deaf-Blind persons, additional and pertinent information will become available.









HELLEN KELLER NATIONAL CENTER FOR DEAF-BLIND YOUTHS AND ADULTS

Headquarters: See Mid-Atlantic Region
National Field Services Supervisor
National Coordinator of Affiliated Services
See South Central Region

SERVICE REGIONS

1

NEW ENGLAND REGION

Connecticut	New Hampshire
Maine	Rhode Island
Massachusetts	Vermont

89 State Street
Suite 1130
Boston, Massachusetts 02109
(617) 523-7015 (TTY & voice)

2

MID-ATLANTIC REGION

New Jersey	Puerto Rico
New York	Virgin Islands

111 Middle Neck Road
Sands Point, New York 11050
(516) 944-8900 (TTY & voice)

3

EAST CENTRAL REGION

Delaware	Pennsylvania
District of Columbia	Virginia
Maryland	West Virginia

P.O. Box 9056
Philadelphia, Pennsylvania 19113
(215) 521-1370 (TTY & voice)

4

SOUTHEASTERN REGION

Alabama	Mississippi
Florida	North Carolina
Georgia	South Carolina
Kentucky	Tennessee

1001 Virginia Avenue
Suite 320
Atlanta, Georgia 30354
(404) 766-9625 (TTY & voice)

5

NORTH CENTRAL REGION

Illinois	Michigan
Indiana	Minnesota
Ohio	Wisconsin

55 E. Wacker Drive
Suite 1268
Chicago, Illinois 60601
(312) 726-2090 (TTY & voice)

6

SOUTH CENTRAL REGION

Arkansas	Oklahoma
Louisiana	Texas
New Mexico	

1111 W. Mockingbird Land
Suite 1330
Dallas, Texas 75247
(214)630-4936 (TTY & voice)

7

GREAT PLAINS REGION

Iowa
Kansas
Missouri
Nebraska

324 East 11th Street
Suite 2310
Kansas City, Missouri 64106

8

ROCKY MOUNTAIN REGION

Colorado
Montana
North Dakota
South Dakota
Utah
Wyoming

12075 E. 45th Avenue
Suite 222
Denver, Colorado 80239
(303) 373-1204 (TTY & voice)

9

SOUTHWESTERN REGION

American Samoa
Arizona
California
Guam
Hawaii
Nevada
Trust Territories

870 Market Street
Suite 853
San Francisco, California 94102
(415) 956-4562 (TTY & voice)

10

NORTHWESTERN REGION

Alaska
Idaho
Oregon
Washington

649 Strander Boulevard
Suite C
Seattle, Washington 98199
(206) 575-1491 (TTY & voice)

CHILDREN'S SERVICES

New Regional Deaf-Blind Centers for FY 1983-84

Department of Education
Office of Special Education and Rehabilitative Services
Office of Information and Resources for the Handicapped
Washington, District of Columbia 20202

REGION 1	Connecticut Maine Massachusetts New Hampshire New Jersey	New York Puerto Rico Rhode Island Vermont Virgin Islands	New York Institute for the Education of the Blind 999 Pelham Parkway Bronx, New York 10469 (212) 519-7000
REGION 2	Delaware District of Columbia Kentucky Maryland North Carolina	South Carolina Tennessee Virginia West Virginia	North Carolina D.P.I. Education Building - Room 436 Raleigh, North Carolina 27611 (919) 733-3617
REGION 3	Alabama Arkansas Florida Georgia Louisiana	Mississippi New Mexico Oklahoma Texas	Alabama Institute for the Deaf-Blind Box 698 Talladega, Alabama 35160 (205) 362-8460
REGION 4	Illinois Indiana Michigan Minnesota	Ohio Pennsylvania Wisconsin	Michigan Dept. of Education Fifth Floor Davenport Building Ottawa & Capitol Streets Lansing, Michigan 48909
REGION 5	Colorado Iowa Kansas Missouri Montanna	Nebraska North Dakota South Dakota Utah Wyoming	165 Cook Street Denver, Colorado 80203 (303) 399-3070
REGION 6	Alaska American Samoa Arizona California Guam Hawaii	Idaho Nevada North Mariana Islands Oregon Trust Territories of Pacific Islands Wisconsin	California Dept. of Education 721 Capitol Mall Sacramento, California 95814 (916) 322-2173

Programs for Training Teachers of the Deaf-Blind

California

San Francisco State University; G
Special Education Department/Deaf-Blind Program
1600 Holloway
San Francisco, California 94132
Telephone: (415) 469-1080
Director: Philip Hatlen, Ed.D.
Founded: 1967; Graduated 126
Graduating in 1982: 6

Massachusetts

Boston College; G
Multi-handicapped/Deaf-Blind Program
McGuinn Hall, B-24
Chestnut Hill, Massachusetts 02167
Telephone: (617) 969-0100
Director: Sherrill Butterfield, Ph.D.
Founded: 1971; Graduated 283
Graduated in 1982: 20

Michigan

Michigan State University; U, G
Counseling, Education, Psychology & Special Education
336 Erickson Hall
East Lansing, Michigan 48824
Telephone: (517) 355-7871
Director: Mrs. Lou Alonso, M.A.
Founded: 1967; Graduated 81
Graduating in 1982: 2

New York

Teachers College, Columbia University; G
Department of Special Education/Sensory Impaired, Multi-Handicapped Program
525 W. 120th Street
New York, New York 10027
Telephone: (212) 678-3864
Director: Robert Kretschmer, Ph.D.
Founded: 1979; Graduated 2
Graduating in 1982: 0

Ohio

The Ohio State University; G
Faculty for Exceptional Children/Deaf-Blind
356 Arps Hall
1945 N. High Street
Columbus, Ohio 43210
Telephone: (614) 422-8789
Director: Judy Genshaft, Ph.D.
Founded: 1975; Graduated 24
Graduating in 1982: 2

Oregon

Portland State University; G
Special Education Department
P.O. Box 751
Portland, Oregon 92707
Telephone: (503) 229-4632
Director: Sheldon Maron, Ph.D.
Founded: 1968; Graduated 55
Graduating in 1982: 3

Tennessee

Vanderbilt University; G
George Peabody College of Teachers
Special Education Department
P.O. Box 328
Nashville, Tennessee 37203
Telephone: (615) 322-8165
Director: S. C. Ashcraft, Ed.D
Founded: 1968; Graduated 127
Graduating in 1982: 5

UNIVERSITY OF ARIZONA
Department of Special Education
Tucson, Arizona 85721

UNIVERSITY OF TEXAS
Department of Special Education
Education Building 306
Austin, Texas 78712

Programs for Training Workers for the Adult Deaf-Blind

WESTERN MARYLAND COLLEGE
(In conjunction with Helen Keller National Center)
Westminster, Maryland 21157

NATIONAL ASSOCIATION FOR THE DEAF-BLIND
2703 Forest Oak Circle
Norman, Oklahoma 73071

INTERNATIONAL ASSOCIATION OF PARENTS OF THE DEAF, INC.
814 Thayer Avenue
Silver Spring, Maryland 20910

AMERICAN ASSOCIATION OF THE DEAF-BLIND, INC.
805 Easley Street
Silver Spring, Maryland 20910

GALLAUDET COLLEGE
800 Florida Avenue, NE
Washington, District of Columbia 20202

REHABILITATION RESEARCH & TRAINING CENTER IN BLINDNESS & LOW VISION
Mississippi State University
P.O. Drawer 5365
Mississippi State, Mississippi 39762

REHABILITATION RESEARCH & TRAINING CENTER ON DEAFNESS & HEARING IMPAIRED
University of Arkansas
4601 West Markham
Little Rock, Arkansas 72205

Deaf-Blind Resource Information

National Deaf-Blind Information & Resource Center
2930 Turtle Creek Plaza, Suite 102
Dallas, Texas 75204
(214) 522-4540

Has developed a computer bibliographic database of resource articles and books on Deaf-Blindness. This database information is available for dissemination to interested persons. Any resource information requests on this subject can be made by contacting the Center at the above address.

A Deaf-Blind bulletin board has also been created on SpecialNet to increase communication among persons concerned with Deaf-Blindness. Participation on this bulletin board can be accomplished through the SpecialNet System. Access is by the command "Check DeafBlind." SpecialNet is an electronic information/communication network for professionals working with special populations. If you do not have access to SpecialNet, you can contact the Center for further information regarding items on the bulletin board.

Publications of Particular Interest to the Deaf-Blind

Deaf-Blind News Summary

Braille, Large Type - Biweekly
World news written in simple English
for the beginning reader

Xavier Society for the Blind
154 East 23rd Street
New York, New York 10010

Deaf-Blind Weekly

Braille - Weekly
World news of a religious nature
taken from the
National Catholic News Service

Xavier Society for the Blind
154 East 23rd Street
New York, New York 10010

Hot-Line to the Deaf-Blind

Braille - Biweekly
Current events and world news
for the Deaf-Blind readers
Free

American Brotherhood for the Blind
18440 Oxnard Street
Tarzana, California 91356

Nat-Cent News

Braille, Large Type -
Published 3 times a year
Magazine from the
Helen Keller National Center for
Deaf-Blind Youths & Adults
with profiles & research reports
Free, in Large Type & Braille

Helen Keller National Center
111 Middle Neck Road
Sands Point, New York 11050

The Good Cheer

Braille - Quarterly
Free

"The Good Cheer"
c/o Betty Bristol
1225 Atlanta
Idaho Falls, Idaho 83401

Resource Directories

Directory of Programs and Services for the Deaf
(published yearly)
American Annals of the Deaf
5034 Wisconsin Avenue, NW
Washington, District of Columbia 20016

Directory of Agencies Serving the Visually Handicapped in the U.S.
(published yearly)
American Foundation for the Blind
15 West 16th Street
New York, New York 10011

Materials in Braille, Tape and Large Print

National Library Service For the Blind & Physically Handicapped
Library of Congress
"Volunteers Who Produce Books, Braille, Tape, Large Print"
Washington, District of Columbia 20542
(202) 287-9275
1-800-424-8567

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, Kentucky 40206
(502) 895-2405

Recording for the Blind, Inc.
215 East 58th Street
New York, New York 10022
(212) 751-0860

National Braille Press
Saint Stephen St.
Boston, Massachusetts 02115

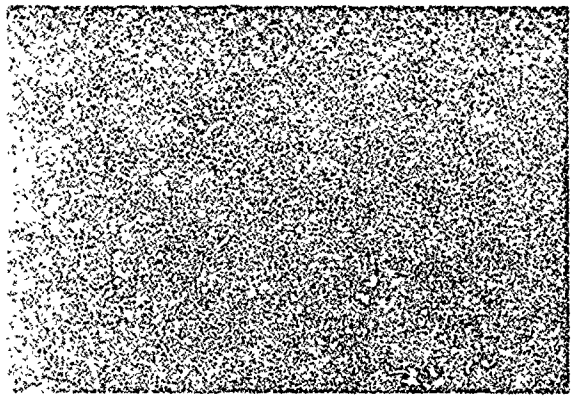
Aids and Appliances Resources

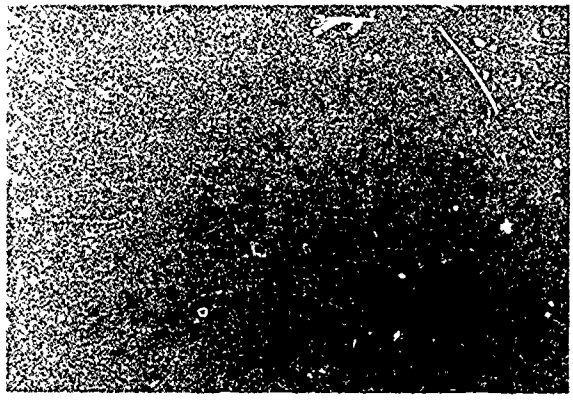
American Foundation for the Blind
Consumer Products
15 West 16th Street
New York, New York 11803

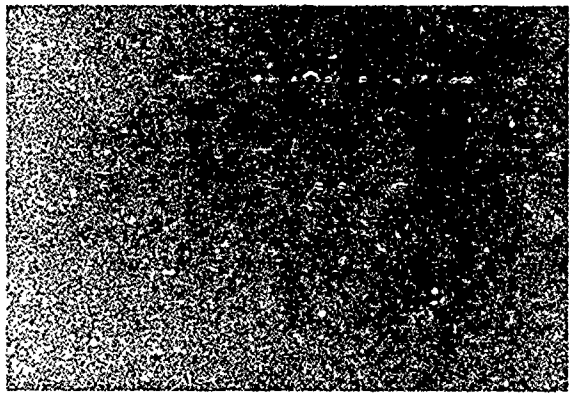
Howe Press
175 North Beach Street
Watertown, Massachusetts 02172

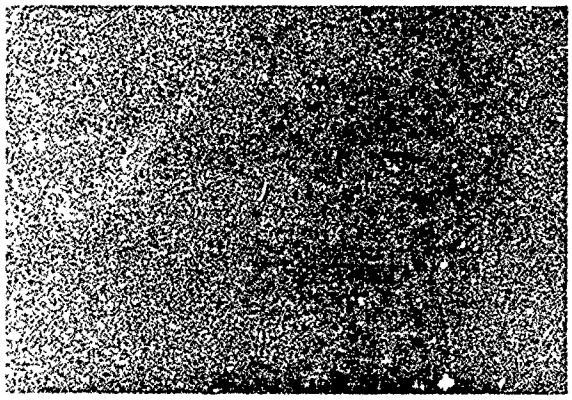
Masachusetts Association for the Blind
Aids & Appliance Store
200 Ivy Street
Brookline, Massachusetts 02414

National Association of the Deaf
814 Thayer Avenue
Silver Spring, Marylond 20910









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